302214

JPRS-EEI-85-072 10 September 1985

## East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

DISTRIBUTION STATEMENT A

Approved for public releases
Distribution Unlimited

19980302 040

DTIC QUALITY ENSPECTED &

**FBIS** 

FOREIGN BROADCAST INFORMATION SERVICE



JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

#### PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports Announcements issued semi-monthly by the National Technical Information Service, and are listed in the Monthly Catalog of U.S. Government Publications issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

# EAST EUROPE REPORT Economic and Industrial Affairs

### CONTENTS

INTERNATIONAL AFFAIRS	
Anniversary of Bulgarian-Hungarian Cooperation Marked (Editorial; IKONOMICHESKI ZHIVOT, 10 Jul 85)	1
BULGARIA	
CEMA Secretary Sichov Interviewed on Future Cooperation (Vyacheslav Sichov Interview; IKONOMICHESKI ZHIVOT, 10 Jul 85)	3
CZECHOSLOVAKIA	
CSSR-Mongolian Cooperation (Jiri Stano; RUDE PRAVO, 6 Jul 85)	7
Bratislava Discusses Directive About Temporary Shop Closures (Bratislava Domestic Service, 14 Aug 85)	9
Metallurgy, Heavy Engineering Results Summarized (Jan Mara; HOSPODARSKE NOVINY, No 23, 1985)	10
GERMAN DEMOCRATIC REPUBLIC	
Agriculture Official Advocates Increased Use of Fungicides (Peter Schwaehn Interview; DEUTSCHE BAUERNZEITUNG, No 23, 7 Jun 85)	13
HUNGARY	
Anomalies in Flow of Capital (Vilmos Falubiro; FIGYELO, 1 Aug 85)	16

	Better Large, Small Undertaking Relations Urged (Gaza Kovacs; FIGYELO, 1 Aug 85)	20
	Agricultural Goals for 1985 Outlined (Imre Kovacs; FIGYELO, 1 Aug 85)	23
	Conflicts of Interest in Crop Production Systems (Andrea Gallai; MAGYAR HIRLAP, 23 Jul 85)	28
	Persistent Agricultural Problems Noted (FIGYELO, 1 Aug 85)	32
POLAND		
	Vice-Minister Reviews Polish-Soviet Cooperation (W. Gwiazda Interview; RZECZPOSPOLITA, 7 Jul 85)	34
	Polish-Yugoslav Economic Protocol Drafted (TRYBUNA LUDU, 10 Jul 85)	36
	India Interested in Shipbuilding Projects (ZYCIE WARSZAWY, 6-7 Jul 85)	38
	Task Force Eyes Erosion of Economic Reform Laws (Irena Dryll; ZYCIE GOSPODARCZE, No 21, 26 May 85)	40
	Deputy Answers Criticism of Polonia Companies (Longin Cegielski Interview; DZIENNIK LUDOWY, 7 Jun 85)	45
•	New Law Restructures Polonia Companies Chamber of Commerce (ZYCIE WARSZAWY, 7 Jun 85)	48
	Ecology Journal Comments on New Water Resources Program (Stanislaw Wrobel; AURA, No 5, May 85)	49
	Efficiency Question Addressed by Planning Commission Official (Jozef Zajchowski; RZECZPOSPOLITA, 9 Jul 85)	52
	Minister Sums Up Progress of New Science, Technical Agency (Konrad Tot Interview; TRYBUNA ROBOTNICZA, 5 Jul 85)	54
	Poles, Soviets Cooperate in Machine Tool Industry (RZECZPOSPOLITA, 1 Jul 85)	58
	Kozienice Power Plant Accident Assessed (RZECZPOSPOLITA, 9 Jul 85)	60
	Fuel, Energy Prospects to 1990 (Zbigniew Wyczesany; RZECZPOSPOLITA, 17 Jun 85)	62

(	Capital	Expansion Needs of Fuels, Energy Industries Defended (Krystyna Wypior; WIADOMOSCI GORNICZE, No 1, Jan 85)	_ 65
1	Product	ion of Coal, Other Energy Sources at Half-Year Mark (RZECZPOSPOLITA, 1 Jul 85)	75
]	Interag	ency Meeting on Problems in Mining Industry (Marek Kownacki; ZYCIE WARSZAWY, 5 Jul 85)	77
. I		cians Association Reports on Industry Problems, Needs (Jacek Szpotanski; PRZEGLAD TELEKOMUNIKACYJNY, No 3, Mar 85)	. 79
N	Manteuf	fel Discusses Agricultural Regions, Crop Distribution (Ryszard Manteuffel; DZIENNIK LUDOWY, 8-9 Jul 85)	83
		Polish-Soviet Economic Cooperation UNDP Rep Visits Turks Offer Electronic Equipment 'BELCHATOW' Output USSR Union Reps Visit Polish-Hungarian Planners Meet Soviet-Polish Rail Electrification Soviet Herring Imports Bus Contract With China Fishing Agreement With USSR New Turbine Testing Device Developed Polish Cargo Flood Statistics	87 87 87 88 88 88 88 89 89
ROMANIA	6		
E	Efforts	To Increase Automotive Industry Exports (Olga Mihaescu; REVISTA ECONOMICA, No 28, 12 Jul 85)	90
YUGOSLAV	/IA	•	
S	Status,	Outlook of Ferrous Metallurgical Industry (PRIVREDNI PREGLED, 20 Jun 85)	96
F		Metallurgical Production Plan for 1985 (Savo Markovic; CELIK, No 112, Feb 85)	98
,	Partne	rs' Withdraw From Kosovo Development Projects (JEDINSTVO, 13 Jul 85)	102

INTERNATIONAL AFFAIRS

#### ANNIVERSARY OF BULGARIAN-HUNGARIAN COOPERATION MARKED

Sofia-IKONOMICHESKI ZHIVOT in Bulgarian 10 Jul 85 p 9

[Editorial: "37 Years Since the Signing of the First Agreement for Friendship, Cooperation and Mutual Assistance Between the Bulgarian People's Republic and the Hungarian People's Republic"]

[Text] On 16 July 1948, the first agreement for friendship, cooperation, and mutual assistance between Bulgaria and Hungary was signed. This historical document, which was continued and developed by the agreement signed on 10 July 1969, occupies an important place in the annals of fraternal relations between two socialist countries.

The tremendous development in the economies of Bulgaria and Hungary during the years of socialist construction create newer and newer possibilities for the dynamic expansion of economic cooperation, for active participation in the international division of labor.

Commodity exchange has been marked by constant growth and increase in variety. The long-term trade agreement for the period 1981-85 foresees an exchange of goods worth 1.450 billion rubles, which is 45 percent greater than it was during the period 1976-80.

Similar structures for production and foreign trade, and similar aims and tasks in a long-term economic strategy predetermine specialization and cooperation in production as a basic direction in economic cooperation between the two countries. Based on this, we are already accomplishing a major part of the mutual exchange of machines and equipment. This represents 90 percent of the total volume of specialized and cooperative production. Bulgaria satisfies 93 percent of Hungary's needs for electric hoists, 85 percent of its electric trucks, 30 percent of its motorized trucks, and all of its needs for calcinated soda. For its part, our country imports the famous Ikarus buses, electronic items, machines, equipment, metals, plant protection preparations, pharmaceutical products, etc.

The tasks of the joint Bulgarian-Hungarian Intransmash and Agromash enterprises are being fulfilled successfully. Items produced by them are winning a good name in the international marketplace. Carrying out the resolutions of the high level economic conference of the CEMA member nations for expanding specialization and cooperation in production is the main factor for determining the rate and structure of future commodity exchange. This will be the basis for further expansion of the integration processes, which are in the interests of the Bulgarian and Hungarian peoples.

12334

CSO: 2200/177

BULGARIA

CEMA SECRETARY SICHOV INTERVIEWED ON FUTURE COOPERATION

Sofia IKONOMICHESKI ZHIVOT in Bulgarian 10 July 85 pp 8, 9

[Interview with CEMA secretary Vyacheslav Sichov, during the 40th session of the CEMA, held in Warsaw, 25 to 27 June, by K. Komarov, correspondent for Novosti Press Agency; date and place not specified]

[Text] [Question] Comrade Sichov, every session of the CEMA is a contribution to systematic, international economic activity among the fraternal member nations of the CEMA. Figuratively speaking, each session plans, to a certain degree, the future of international cooperation. What will this be, in light of current discussions?

[Answer] The future of economic integration within the framework of the CEMA is tied to the constantly growing role of factors which are characteristic for the socialist traits of economic relations, with the internationalization of social life. This means most of all a further strengthening of the worldwide socialist system of management. In accordance with the resolutions of the economic conference of the CEMA member nations, which took place in June of last year in Moscow, the collective work of communist and workers' parties and the governments of the fraternal nations will be strengthened for the development of cooperation, for the further enhancement of socialist economic integration, for the active exchange of experience in economic construction. The basis for the process of integration is the gradual perfection of international specialization and cooperation in production, based on the latest achievements of science and technology, of transportation, etc. With the development of cooperation, these will come closer and closer together. Ties in industry will be developed and expanded, joint sites for the mining and electric power industries will be built, efforts will be united in the field of agriculture. We will see tremendous development in specialization and especially cooperation in machine building, radio electronics, the chemical industry and other branches, which together determine the development of scientific-technical progress.

Integration will become a stronger influence for strengthening the national economies, for the intensification of production, for raising the level of technology, for increasing the social productivity of labor. We will see an expansion in the scientific-technical, production-economic, and trade ties between the European member nations of the CEMA and the Socialist Republic

of Vietnam, the Republic of Cuba, and the Mongolian People's Republic. This will mean broader and more effective participation by these countries in the international socialist division of labor, with a view toward resolving the problem of constantly attaining the level of economic development of the other member nations of the CEMA.

The cooperation mechanism (most of all the coordination of national economic plans) will be perfected and developed; this is the chief instrument for agreement between the economic policy and the formation of lasting economic and scientific-technical ties among the fraternal nations.

In this way, conditions will be created, systematically, jointly, and purposefully, for moving on to a higher, qualitatively new level of internationalization of production and exchange of experience in socialist construction.

[Question] The task of greater satisfaction of the population's needs for foodstuffs and industrial commodities is in the foreground of programs for the social development of each country and for raising the standard of living. What will be done to carry out this assignment?

[Answer] In the various countries organizations for major production of high-quality foodstuffs have been developed, variety in domestic consumption has been expanded. This has meant a tenfold increase in the mutual supply of foodstuffs in the last 25 years. In future years, each of the fraternal nations will focus efforts on maximal utilization of its own natural-climatic and other data for further increasing the production of foodstuffs, for ensuring stable supply to the population and improving the structure of consumption. This will assist in increasing the mutual supply of foodstuffs and in this way resolve the problem of supplying foodstuffs with the help of cooperation.

In regard to consumer goods, expansion of their variety and improvement of their quality is more directly linked to the needs of the international market. Mass consumption items occupy third place in exports among the member nations. The plan is to further develop the measures already implemented thus far for cooperation in the field of light industry, to attain an increase in the volume of mutual supplies of two to three times by 1990, and even four to five times in the more distant future. For such a sharp increase in mutual supplies, it will be necessary for light industry enterprises to be refitted, to increase their raw material bases, and based on this, to expand significantly their variety of items, to increase their quality.

In order to attain their goals, we foresee enhancing cooperation in creating and implementing elements of the system for automated design of fabrics, the production of sewing machines operated by computer, and the production of flexible automated systems for making shoes. Together with this, systems for automated control of technological processes in light industry, based on microprocessor technology and robots, will be developed.

[Question] From what you have said so far, it follows that the execution of these tasks, which are characterized by comprehensiveness and mutual commitments, there is a need for the development and perfection of the mechanism for cooperation among the member nations of the CEMA.

[Answer] The question of perfecting the mechanism for cooperation within the framework of the CEMA is a very important one. It is necessary, and this was stressed at the high-level economic meeting of the fraternal countries, for the mechanism to be more active, to respond to the task of international division of labor and raising its efficiency, organically combining cooperation in the field of planning activity with the active utilization of commodity-currency relations, in order to perfect an active system for price formulation in mutual trade, as well as instruments for hard currency and financial cooperation. Work on these questions is now actively taking place in the CEMA.

[Question] Does this not lead, as Western propaganda once affirmed, to the unification of economic management in the various socialist countries?

[Answer] To say that this means unification of the national systems for planning and managing the national economy is profoundly wrong. No one ever set such a task for the nations in the socialist community! The national systems for planning and managing the national economy are sovereign in each nation. They are determined by their scales, by the level of development of the production forces, and other specific conditions, and they are regulated by the national legislative bodies.

An entirely different question is the possible confluence of the economic mechanisms of the nations in the process of their mutual cooperation, the exchange of experience and the utilization of the best solutions of individual countries in the practices of others. This is an objective process under the conditions of socialist economic integration. This means agreeing on the acceptable conditions, the rules for cooperation, and developing the mechanisms for cooperation. In this way we ensure better compatibility and mutual adaptation, which simplifies the solution of general production, scientific-technical, and major economic problems, and eases economic cooperation and mutual assistance.

Within the framework right now of the CEMA Committee for Cooperation in the Field of Planning and a number of other CEMA organs, proposals for bringing closer the structures of the economic mechanisms, which are important for perfecting mutual cooperation, are being developed.

[Question] In your response, you mentioned "mutual assistance." Permit me to ask this type of question: The aim of the first international socialist organization is contained in its title itself -- the Council for Economic Mutual Assistance. What is meant by the notion "economic mutual assistance" at this stage?

It is true that the name of our organization corresponds to the essence of its activity. This is fraternal cooperation, full equality, and comradely mutual assistance. Through unification and coordination of the efforts of the member nations, the goal of the CEMA is to influence the unceasing increase in the living standards of its peoples.

Practice in all spheres of economic activity, concrete agreements for the development of cooperation, which ensure mutual benefit for each participating country, precisely cover the basic content of the notion "economic mutual assistance." Here I would like to give the example of the latest agreements for joint production of equipment and construction of nuclear power plants. In the near future the nuclear power plants will become the basic energy sources for the CEMA member nations. Their capacities have now reached 30,000 megawatts, and in the next ten years this will increase to 100,000 megawatts. Thanks to cooperation in the production of nuclear plant equipment, the community's nations will totally satisfy their needs. No one country could have done this alone.

A good example of comradely mutual assistance is the cooperation of the CEMA member nations with Poland, during its difficult period, when the United States and some other capitalist countries limited trade with it, trying to utilize the supply of component parts and technology items for political pressure and blackmail. Our Polish comrades affirm that cooperation from the USSR and other CEMA member nations had a tremendous significance in overcoming difficulties.

The member nations devote much attention to assisting the newer members of the community: Vietnam, Cuba, and Mongolia. Here we are speaking about quickening their development and raising the efficiency of their economies.

For example, with the cooperation of the USSR alone, 1,500 sites have been built, reconstructed, and are continuing to be built. Cooperation encompasses all areas of development, including science and technology. This is how multifaceted mutual assistance and fraternal cooperation are.

[Question] This addresses the topic of relations among the member nations. What is the position of the CEMA toward cooperation with other nations?

[Answer] As we know, the CEMA is an open organization. Other states can take part in the development of cooperation with the member nations. The CEMA is for expanding ties with developing and developed capitalist nations on a mutually beneficial, equal-footing basis, which is characterized by the principle of non-interference in the internal affairs of nations.

[Interviewer] Thank you, Comrade Sichov, for your attention. On behalf of the editors of IKONOMICHESKI ZHIVOT, I wish you success in your work of turning the session's resolutions into practice.

12334

CSO: 2200/177

CZECHOSLOVAKIA

#### CSSR-MONGOLIAN COOPERATION

Prague RUDE PRAVO in Czech 6 Jul 85 p 7

[Article by Jiri Stano: "Enrichment of Cooperation"]

[Excerpt] On Thursday, the visit by the Czechoslovak party and government delegation, led by Comrade Lubomir Strougal, to the Mongolian People's Republic came to its conclusion. Its goal was to find ways for deepening mutual cooperation in the political, economic and scientific-technical area, together with the Mongolian comrades. The results of the 3-day productive and open negotiations, which tied in with the negotiations of the party and state delegations of the CSSR and the Mongolian People's Republic at the highest levels in June 1978, were summarized in two documents: the Long-Term Program of Economic and Scientific-Technical Cooperation Through the Year 2000 and the Protocol of the 13th Session of the Interstate Czechoslovak-Mongolian Commission for Economic and Scientific-Technical Cooperation.

For a number of years our country has been sharing in the expansion of Mongolian industry, which has a fundamental importance with regard to the universal development of the national economy and a rise in the standard of living of the peoples of the Mongolian People's Republic. From the standpoint of economic relations with the Mongolian People's Republic, we stand in second place following the USSR. Trade exchanges are constantly being deepened and expanded. We deliver various types of machinery, installations and spare parts to Mongolia, particularly for the leatherworking and footwear industry, as well as buses, stationary diesel engines and a number of other products including consumer goods. The Mongolian People's Republic, in turn, delivers hides, wool, etc., and deliveries of copper and other mineral raw materials play an ever increasing role in Mongolian exports to Czechoslovakia.

Successful and mutually advantageous Czechoslovak-Mongolian cooperation has been ongoing for 25 years. The Mongolian people value our unselfish aid in industrialization, in the handing over of technical know-how and in the effective aid rendered in increasing the qualification of specialized cadres for the most important sectors of the Mongolian economy. During the current 5-year plan we are jointly completing the reconstruction and modernization of leatherworking enterprises, we have completed the rough construction of a complex of new footwear enterprises in Ulan Bator, the principal facility of which is already in its third year of operation. Now, we will jointly create

conditions for the enterprise to be fully utilizing its planned capacity of 3 million pairs of shoes per year, starting in 1986 at the latest.

The footwear and leatherworking industry is one of two areas on which we plan to concentrate attention in the future in mutual cooperation. The second is prospecting for, extraction, and processing of raw materials of mineral and biological origin. The work of our geologists deserves special mention at this point. Cooperation in geological prospecting has a long tradition. Some 5 years ago we attained a higher level of cooperation by the creation of a joint Czechoslovak-Mongolian enterprise—the Mongolcechoslovakmetal Enterprise, whose task, in addition to prospecting, is the extraction of mineral raw materials. It is our joint effort to make its activity more profitable, to expand its field of activities and to safeguard future development in accordance with the needs and interests of both countries.

Our delegation was convinced of the possibilities in this direction during their visit to the South Gobi Ijmak (kraj), where deposits of copper, tungsten, coking coal and other raw materials which are important to the development of energy, machinebuilding and the electrotechnical industry, were found. Some proposals for deepening cooperation in this area are anchored in a program of long-term economic and scientific-technical cooperation through the year 2000. Our geologists, who have already discovered the great copper deposit near Erdenet, as well as other specialists, are scheduled to participate in the work even with regard to becoming familiar with these deposits.

5911

CSO: 2400/547

CZECHOSLOVAKIA

#### BRATISLAVA DISCUSSES DIRECTIVE ABOUT TEMPORARY SHOP CLOSURES

LD141956 Bratislava Domestic Service in Slovak 1630 GMT 14 Aug 85

[Summary] About 200,000 employees work in the sphere of trade and services in Slovakia; out of this number over one half work directly in the trade economic units. Over 80 percent are women. As distinct from other spheres, unforeseeable circumstances, such as illnesses, but also holidays, especially in small shops, can be reflected in temporary closures of the shops.

Peter Novak, an employee of the Ministry of Trade of the Slovak SR, discusses this problem in his note:

[Novak] One of the ways to combat this situation this summer season was a directive of the Ministry of Trade of the Slovak SR issued to Commercial Organizations and National Committees, which is substantially stricter concerning the temporary closure of shops. Although it is still too early to assess comprehensively the results of this directive's effectiveness, the data collected so far, is positive. For example, in comparison with the same period last year, the number of temporarily closed food shops fell by over 15 percent.

There still exist individual cases which contradict this favorable trend. There also exist individuals who lack discipline and who close the shops of their own will. The appropriate organs are taking strict measures against such individuals. The National Committees, in the long run, decide on temporary closures of shops. They should use their power consistently. Inconsistency in this respect was recorded at Liptovsky, Mikulas and Zilina last week.

CSO: 2400/564

CZECHOSLOVAKIA

METALLURGY, HEAVY ENGINEERING RESULTS SUMMARIZED

Prague HOSPODARSKE NOVINY in Czech No 23, 1985 p 2

[Article by Jan Mara, employee of the CPCZ Central Committee]

[Text] The positive results achieved by the metallurgy and heavy engineering sector in 1984 developed the conditions for a smooth transition to the final year of the Seventh 5-Year Plan.

The fulfillment of the implementation plan and overall growth in the first quarter of 1985 were affected by adverse weather conditions in January and February and also by the fact that in comparison with last year there were 2 fewer working days available. More than a little worker initiative went into coping with the shortfalls brought about by the harsh frosts. In economic production units [VHJ] and enterprises significant emphasis has been placed on the fulfillment of product mix targets with the objective of not disrupting supplier-consumer relationships. The commitments movement and work activity devoted to the May holidays may have been very supportive of this.

This year in the first quarter the sector recorded relatively good performance. The time stock amounted to 25.36 percent of the total annual supply. For adjusted value added 25.1 percent of the yearly target was fulfilled, the same figure that was recorded for adjusted value added in terms of labor productivity. Targets for all charges-paid exports to socialist countries were fulfilled at a 24.6 percent level, and 26.4 percent fulfillment was recorded for exports to nonsocialist countries. The annual targets for goods production were fulfilled by 25.3 percent, domestic market deliveries by 25.4 percent, capital deliveries by 16.1 percent, profit targets by 27 percent, and inventory targets by 99.2 percent.

Even though the target for capital deliveries was exceeded by Kcs 722 million, only 16.1 percent of the annual target was delivered, which occurred because of uneven quarterly distribution in line with supplier-consumer relations and contracts at large facilities. Of 76 facilities slated to be started up for test operations in 1985 only 12 have been made operational. According to the plan breakdown, metallurgy and heavy engineering VHJ and enterprises are supposed to have a total of 238 this year, at 161 construction sites.

Export targets according to the breakdown were fulfilled, even though targets for exports to socialist countries did not meet their annual quarterly level. This came about mainly because of Olomouc Sigma, Plzen Skoda, and Ferrous Metallurgy. This also occurred because it became necessary to assure that unfavorable developments early in the year did not disrupt internal production targets, mainly for products from the Ferrous Metallurgy VHJ.

The shortfall in goods production, which had amounted to Kcs 421 million by the end of February, was reduced by Kcs 202 million in March. The deficit in the first quarter sustained by Plzen Skoda, Ferrous Metallurgy, the Prague plant of Ceskomoravska-Kolbeen-Danek and Metallurgical Subassemblies was made up for in April. The number of enterprises not fulfilling the plan for goods production fell from 32 at the end of February to 15 at the end of April.

The plan for gross production in the first quarter was not fulfilled by 41 enterprises, with the total shortfall amounting to Kcs 600 million. There were two fewer working days during this period this year in comparison with last year; this accounted for Kcs 46 million of the production shortfall, even though daily production increased by 3 percent over last year.

Lower sectoral employment levels had an impact on heavy engineering. This lack of employees was especially evident at the Prague plant of Ceskomoravska Kolbeen-Danek and at the Plzen Skoda plant. Of the engineering VHJ only Olomouc Sigma had a larger work force (up by 0.1 percent) and the Czechsolovak Air Technology Plants (up by 0.2 percent). At metallurgical plants planned employment levels were not achieved at Metallurgical Subassemblies, and especially at the Kladno Scrap Metal Industry.

The failure to fulfill planned targets in labor productivity in terms of adjusted value added occurred mainly because of performance at two of the largest VHJ, namely Ferrous Metallurgy (98.8 percent fulfillment) and Plzen Skoda (97.6 percent fulfillment). At Ferrous Metallurgy the poor performance resulted from higher than planned power costs. In the area of work time utilization most VHJ recorded relatively better performance.

Profit targets were exceeded by Kcs 368 million, or 3.8 percent. This resulted mainly from savings in the area of costs, and from foreign trade performance. Planned profit levels were exceeded both in the metallurgical and ore mining sector as well as in heavy engineering.

Costs per koruna of output were 0.08 halers lower than projected by the plan for the sector as a whole. In material and other costs 0.09 halers per koruna of output were saved, while finance costs per koruna of output were only 0.06 halers lower than planned. Inventories developed favorably; on 31 March there was Kcs 919 million less in inventories than on 1 January, a figure that put inventories Kcs 2.3 billion lower than planned.

Only 13.8 percent of the annual target for internal capital construction was met. At the same time targets were met for volume of completed work and deliveries in all VHJ as well as binding state plan targets. This means, however, that most of the capital construction work will be shifted to the later months of this year.

In April there was an improvement in goods production. Plan targets were exceeded by Kcs 367 million (2.6 percent) at the same time that all VHJ met their targets. All VHJ have met their targets for the first four months of this year. The number of enterprises not meeting their targets declined from 15 at the end of March to 6 at the end of April. In the Ferrous Metallurgy VHJ production of the basic product line was exceeded. At Vitkovice the production of coke and pig iron was up and shortfalls from previous months in rolled material production were made up.

Shortages persist in gross production despite the positive performance figures for April (2.5 percent more production than planned). Positive results were achieved in labor productivity in terms of adjusted value added, where the shortfalls from the first quarter were made up. Neither the Ferrous Metallurgy VHJ nor the Skoda Plzen plant are performing at the target levels, even though they have all but eliminated shortfalls in adjusted value added figures from earlier this year. The month of May saw a continuation in these positive trends as well as in qualitative and volumetric indicators.

At the present time the entire sector is concentrating on preparations for the Eighth 5-Year Plan. The demanding tasks that will face the metallurgists and machinists will require conscientious communication between VHJ and enterprises. Most of their efforts will be devoted to the achievement of intensification. For this reason attention is being devoted to further reducing material and power intensiveness, to increasing labor productivity, and to the link between increased earnings and labor productivity.

In the production of the heavy engineering sector the next 5-year plan projects an increase of more than 20 percent. In the metallurgy sector the focus will be on improving the quality of production processes and on increasing output. The use of output depends on the material resources that are generated and will be directed mainly at deliveries for export and for capital investment, where this sector plays a crucial role. Export targets are generating substantial pressure for the requisite changes in the structure of production.

Recently a number of employees of the metallurgy and heavy engineering sector were presented with state, union and enterprise awards. Such positive work results serve as motivators that cause the further expansion of initiatives directed at the successful conclusion of 1985 and thereby of the entire Seventh 5-Year Plan.

9276

CSO: 2400/493

GERMAN DEMOCRATIC REPUBLIC

#### AGRICULTURE OFFICIAL ADVOCATES INCREASED USE OF FUNGICIDES

East Berlin DEUTSCHE BAUERNZEITUNG in German No 23,7 Jun 85 p 4

[Interview with Dr Peter Schwaehn, Head of the Plant Protection Service in the Ministry for Agriculture, Forestry, and Foodstuffs by Reporter Georg Martin; date and place not specified]

[Excerpts] [Question] This spring plants developed slowly at first but then caught up to reach their normal stage of growth in a short time. As a result of this was the Plant Protection Service burdened with special demands?

Dr Schwaehn: You can say that again. The time period, during which the plant-growth regulators are produced, was shortened drastically. Indeed, the plants, so to say, rushed through their development stages from internodes 4 and 5 to internode 10. Since the treatment of cereals is dependable with applications only during this period of plant growth, very quick action had to be taken. The farms, however, were quite ready for it. They operated their machinery right from the beginning in extended shifts or in double operations and over the weekends. Thus, they succeeded—and this is a record so far—in treating a surface of 600,000 hectares within one week.

[Question] In many cases a product to prevent fungal injury, a fungicide, was mixed into the spray composition at the same time.

Dr Schwaehn: That is done by all means when the deadlines for the application or the control measures, respectively, coincide to a great extent. In this manner one operational step is saved. Of course, triple combinations—that is the further admixture of a herbicide—should be avoided since they could otherwise result in injury to the plants.

[Question] This year more fungicides than ever are available. Is there is a corresponding need?

Dr Schwaehn: Definitely. In previous years the root, leaf, and head diseases, such as mildew and cereal rust, increased above all among the well developed cereal stands. Even this year winter barley and winter wheat were infected with the agent for stem rust to a considerable degree (50 to 60 or 30 to 40 percent, respectively, of the fields). It was recognized and controlled in time.

Those cultures were shown to be particularly endangered that follow after the cereals, if sowed early, show a well-nourished condition or possess a slight (depending upon type) resistance, respectively.

With a comprehensive production experiments scientists had shown as far back as 1982 and 1983 that even under field conditions considerable increases in yield are possible whenever fungicides are applied. Industry then prepared even more of these products for us.

[Question] With how much success were they applied?

Dr Schwaehn: Because we had arranged with the district councils to provide the economy data, exact data are available. Accordingly, for example, in the LPG Lindau, Kreis Zerbst, an increased yield of 5.6 dt/ha on the fields was reported. In the LPG Langenweddingen it came to as much as 7.1 and an average of 5.0 dt/ha in the Magdeburg Bezirk. For the whole GDR a cereals yield increase of 3 to 5 dt/ha can be assumed.

[Question] What financial investment can be applied to this?

Dr Schwaehn: In the Magdeburg Bezirk the application and product costs came to 60 to 85 marks/ha. If cost to returned value is compared, ratios of 1:4 to 1:5 are obtained. The application of fungicides thus proves to be very effective economically.

With the products being made available in greater quantity, we are now in a position to treat a million hectares of cereal fields. We must expand the area of treatment even beyond that in the near future as a result of the experimental data in order to be able to control effectively the fungal diseases everywhere. The highly effective products necessary for this are to be applied therefore only where the approximate values of control are achieved.

If a field must be treated more than once, which can also occur, care must be taken that products based upon the active ingredient Carbendazim (Bercema - Bitosen, Falicaben) may not be applied repeatedly since otherwise symptoms of resistance can appear.

[Question] Are these procedures known to all phytopathologists?

Dr Schwaehn: Since 1984 we provided for a comprehensive certification for specialists. They must indeed know precisely the application directions. For example, this also applies to the amount of water for the control of stem rust which must come to at least 400 L/ha. Even the daily temperature may not be ignored. (Bitosen causes plant burning above 25° C).

Besides the Bezirke and Kreise possess plans for measures by which the fungicide application is carried out with legal supervision. In this case work teams, which are composed of specialists, proved useful. They construct a picture on the basis of surveillance data and the prevailing situation and recommend how and with what applications can best be made. The farm phytopathologist-agronomists in consultation with them receive from the Kreise their

corresponding recommendations how the products are to be applied with the greatest effect. With respect to this mention is made once again of an economical procedure, particularly with the so-called broad-spectrum fungicides Tilt 250 EC and Bayleton Liquid, that are effective against several diseases at the same time.

[Question] Can they expect resistance to the application of fungicides?

Dr Schwaehn: That is everywhere, for example, where people are not yet convinced of the advantages of the mobile spray method which is indeed a prerequisite for high efficiency during the application. It was also shown that in cooperation with the Agrochemical Center even more improvements can be made. Those farms do best that have assigned definite plant protection brigades to their territorial areas. If the specialists live where they work, that permits an early start in treatment. Furthermore, those gain in effectiveness that have prepared an inventory of all the machinery and equipment including aircraft available in the Kreis and afterwards organize cooperative assistance. Many places, for example, slightly delay the fertilization by plane in favor of the deadlines tied closely to the plant protection measures.

Also, through the additional certification of the cooperative farmers and workers engaged in plant protection the effectiveness of the measures can be improved even more. Accordingly, further education based upon local conditions can now be carried out with new instruction kit that is available to the Kreis' agricultural schools. It is so arranged that the educational materials particularly important for this period are now also provided during the summer months.

12446 CSO: 2300/471

HUNGARY

#### ANOMALIES IN FLOW OF CAPITAL

Budapest FIGYELO in Hungarian 1 Aug 85 p 4

[Article by Vilmos Falubiro: "Capital Flow With Question Marks"]

[Text] The property background of the institutions participating in capital flow among enterprises can now be put at about 90 billion forints. This is 5.5 percent of all enterprise and cooperative property and 37 percent more than the developmental fund generated in 1984.

Chief Types of Decentralized Capital Regrouping at the End of 1984

Type of Capital Flow	Character	Billions of Forints
Cooperative type capital flow forms:		
Developmental moneys	Developmental mo transferred an received	d
Non-independent legal association		10.0 25.1
Independent association (joint	riopeity deposit	23.1
enterprise, etc.)	Property deposit	30.1
Small undertaking forms:		
Small undertakings (enterprise economic work associations, economic work associations,		
etc.)	Property	5.5
Small enterprises, small		
cooperatives	Property	7.8
Monetary type capital flow:		
Flow based on securities	Bond fund	5.9
Small banks	Base capital	4-6
Total		About 90.0

Of the types analyzed the youngest and the most promising, flow of a monetary character, is just getting started. It is still difficult to judge today what role will be played by the entry of small banks into undertakings, raising capital based on issuing bonds and shares and commercial credit.

The transformation into one another and "painless" deaths of the special groups, GMK's [economic work associations] and small cooperatives, which react sensitively to market changes, are themselves forms of capital movement. In this sphere the capital sticks to the coating to a very small degree; the combinations, separations and terminations are accompanied by little friction.

It can be noted, for example, that some special groups are becoming main work time operations, being transformed into small cooperatives or independent GMK's. The VGMK's [enterprise economic work associations], constituting the most extensive form of small undertakings, on the other hand, are left out of this circulation. The reason is obvious—this form of association, with an autarkic goal, is employed primarily "inwardly".

#### Branch Barriers

The various versions of cooperation realize the largest proportion of the assets regrouping—as we can see from the table. But we would be deluding ourselves if we were to accept, without criticism, that this capital really flows without restrictions. The circumstances of the use of the 10 billion forints for investment purposes warns us of this first of all.

Branch Distribution of 10 Billion Forints of Developmental Moneys Transferred

Category	Developmental Moneys in Billions of Forints		Distribution of Enterprise Property, percent	
	Given Over	Received		
Industry, construction Foodstuffs economy Transportation, postal Domestic trade Foreign trade Water management and services	2.7 2.7 0.9 1.3 0.8	2.5 2.1 0.6 0.6 0.5	39.6 24.2 13.3 10.2 1.4	
Economy, total	10.0	10.0	100.0	

(Prepared on the basis of a statistical report for 1984 prepared by the Hungarian National Bank.)

Only a fraction of the resources given over and received pass over the branch barriers—one can find a balance of 2.1 billion forints (3.7-1.6=2.1) in the "water management and services" line. So even if capital is capable of "breaking out" of the enterprise frameworks, it can hardly pass over the "cordon" of the economic branches.

The closed nature of industry and the construction industry merits special mention. Almost 40 percent of the enterprise property is concentrated here, but only 10 percent (0.2 billion forints) of the balance of capital flow between branches attaches to these branches. In all probability the inclination to use resources "in-house" is strongest here. In contrast to this the foodstuffs economy participates in regroupings directed to other areas in almost the same proportion as its share of property while trade does so with a weight exceeding it. It is interesting that capital is migrating from the producing branches to services. Nevertheless, "getting into" waterworks, sewerage, laying pipe and urban management is not a business undertaking; even less is it a profitable investment.

"The 'real' capital movement among branches and sectors," we can read in a 3 December 1984 report of the Auditing Main Directorate on the theme, "hardly reaches the minimal level; the possibilities for regrouping assets between trade and agriculture and between industry and agriculture are not being exploited."

#### The Foodstuffs Economy Leads

We can see from the first table that of the capital flow forms of a cooperation character the simple associations and associations with legal entity status, emcompassing property deposits of about 55 billion forints, are the most considerable channels for moving liquid property, primarily in agriculture.

It might be noted that sometimes a single MGTSZ [agricultural producer cooperative] takes part simultaneously in 7-8 associations, and each simple association brings into the cooperation outside capital exceeding its own capital many times. Organizations representing differing stages of production and trade "meet" in a number of associations, furthering an integration extending from research through production to marketing and export. Sometimes these cooperations "syphon" capital into agriculture from the foodstuffs industry and from foreign trade, while the opposite of this is not common. In 1984 there were 565 simple associations and 158 independent associations with legal entity status recorded in the sphere of state enterprises. The two figures for cooperatives were 959 and 215.

In contrast to this the formation of subsidiary enterprises and foreign mixed ownership enterprises in the state sphere not only does not lag behind the cooperative sphere but rather even exceeds it by a good bit. At the end of 1984 there were about 150 subsidiary enterprises and 26 mixed ownership enterprises, as opposed to about 10 and 2 respectively operating in the cooperative sector. Of the bond fund of 5.9 billion forints, 5.5 billion comes from the state enterprises.

All this indicates that the trends for accumulating capital in the state sphere are tied more closely to the modern organizational forms coming recently into the foreground.

Mutual Distrust

What are the prospects in the development of resource regrouping?

Certain regulators are eliciting just criticism from the side of the enterprises. In agriculture, for example, the taxation of joint enterprises of a non-agricultural character further moderates the withdrawal possibilities which the founders have found small already—maximized at 40 percent. Although the sudden change in the regulators has already kept some of the producer cooperatives far away from participation in the founding of joint enterprises, the simple associations are becoming popular instead. The uncertainty over disposal of property deposits has a similar effect. Founders desiring to leave an independent association with legal entity status can get at their money only with great difficulty because of the lack of negotiability.

But the biggest problem is the immediate consumption of free monetary assets. For example, in 1984 the enterprises and cooperatives used more money for accumulation than they had total resources, thus the closing supply, according to an evaluation by the Hungarian National Bank, decreased further, from 31 billion forints to 26 billion forints. It appears that management efforts can and must continue to be guided by fundamental "prompt" fiscal withdrawals or even by preferences. In all probability the latter also play a role in the "campaign" to form subsidiary enterprises instead of having the creation of these be encouraged by real profitability considerations. (The thought might also arise that these prompt methods themselves induce the immediate spending.)

At the same time it is a fact that to a certain degree the limits of the existing regulation also determine enterprise behavior. At present, for example, the party handing over developmental moneys cannot stipulate a right to have a say in their investment. The property deposits cannot be negotiated either and this—as we have seen—holds back a development of association property interest. Thus, sooner or later, a spread of the joint stock company form must come on the agenda.

8984

CSO: 2500/480

HUNGARY

BETTER LARGE, SMALL UNDERTAKING RELATIONS URGED

Budapest FIGYELO in Hungarian 1 Aug 85 p 4

[Article by Gaza Kovacs: "Cooperation With the Little Ones; Possibilities and Limits"]

[Text] One way or another the enterprises are trying to decrease the risk deriving from uncertain outside cooperation contacts. Some are making preparations for the fullest possible self-supply. Other enterprises are trying to build up a circle of stable shippers. And many, even today, expect an easing of their problems from the winning of import permits.

A possibility which is not entirely new, but which was hardly used earlier, has been spreading since 1982--strengthening contacts with small operations. Three years ago not only were there few flexible small operations which supplement large industry well, but a number of regulations hindered the background industry utilization of the existing artisan capacity. In order only to be able to undertake "public" orders the artisans limited the possibility of acquiring from enterprises the tools of production indispensable for their work. It is characteristic that in 1980, for example, only about 4 percent of the entire production value of artisan industry derived from public orders. In the next two years-between 1982 and 1984--by breaking down the previous limits and creating the new organizational possibilities, the system of contacts between enterprises and small operations strengthened more and more. Last year, as a result of this, 25,000 artisans produced almost 10 billion forints' worth of goods for public orders and 2,000 economic work associations produced nearly 5 billion forints' worth of such goods. These figures, however, show an order of magnitude increase only when compared to the earlier period; they are dwarfed beside the order of magnitude of the needs of the enterprises for outside cooperation. And this is understandable too if we compare the capital strength, equipment and production capacity of the small organizations to the traditional shippers (enterprises, industrial cooperatives, auxiliary operations of producer cooperatives) to enterprises needing outside cooperation.

#### Advantages and Dangers

The advantage in cooperation is first of all reducing production costs and improving efficiency. An incidental consequence might be more concentrated,

and thus more effective, technical development. In addition, by means of cooperation, the enterprise might profit from outside, special expertise. Outside cooperation is a proven tool for reducing internal manpower problems and it also facilitates more flexible accommodation to environmental effects.

Of course, outside cooperation has its dangers too. For example, a longer run through time for manufacture and a deterioration of the quality and time limit parameters of the production process. In some cases making changes in a deal becomes more complicated as well.

According to the experiences of recent years, the advantages of the small organizations are being used well in the cooperation contacts—flexibility in undertaking jobs and in carrying out the changes which become necessary along the way; a demanding attention to quality and precisely adhering to time limits; and in fulfilling the obligations undertaken in the contract in general. All this is so because for the most part those working in the small organizations have high expertise, sometimes they are in a sharp competitive market situation, and only a good reputation can give them livelihood security. It also creates a unique situation that in the small organization—large enterprise relationship the latter is the stronger, so the defencelessness of the customer, so often complained of by the enterprises, ends.

Studies done in the past 3 years prove unambiguously that the GMK's [economic work associations] and artisans are interested in building up lasting and broad enterprise contacts. (Editor's note: The author is referring to a series of studies done at the Labor Affairs Research Institute of the State Wage and Labor Affairs Office.) From the technical viewpoint the orders, representing a large volume for them, make possible substantially better capacity exploitation than satisfying the ad hoc and occasional needs of the populace. Frequently the large enterprise gives them help in easing their material and tool supply problems, otherwise unsolved. In their contracts the small organizations gladly accommodate to the material and time norms used at the enterprises, because in this way their higher than average expertise, work discipline and organization result in profitability above the average. It also counts for much that their general costs are substantially lower than the specific values appearing in the enterprise calculations.

Whom does the enterprise regard as a good partner if it wants to hand out a commission? The most important condition is appropriate technological preparedness and expertise. In addition it is also important that the contact be free of bureaucracy, that the partner should be flexible, that the lowest possible overhead burdens production, that shipping and maintaining contact be easily solved. Everyday experience shows that the enterprises are also careful that the partner should be an old and tested one, as surely reliable as possible, and, what is perhaps most important for them, that it is possible to develop a power advantage vis-a-vis the small entrepreneur in the course of possible disputes.

Weak, But Good

Well, for the most part the small undertakings meet these requirements and conditions.

A discrepancy can be discovered at two points. On the one hand there is no doubt that the technical equipment of the small undertakings does not always suit the enterprise needs. Many contracts fail to be consummated only because of this. On the other hand one can sense a sort of distrust on the part of the enterprises, simply because for the most part it is necessary to make contact with a partner who is new to them. An undeniable nervousness can be experienced in regard to the private sector. Supervision and various official audits have definitely punished economic production contacts of this type, and in any case the economic leaders, subject to many sorts of attack, still are not happy to undertake the risk, even if a commission given to a private entrepreneur would be profitable for the enterprise as well.

Experience shows that the great majority of the commissions won by the small undertakings are not the result of healthy market competition developed with the rules of the game, but rather are the fruit of personal contacts and acquaintance. This must be acknowledged today, but it cannot be consented to over the longer run, because chance should not be permitted to rule over the true interests of the managing organizations. If we are striving to develop the small organization-large organization contacts, then we must start from the position that in truth there are common interests even today. Thus the obstacles to cooperation can be removed not only and not primarily with administrative tools, but rather by increasing the market effects which can be sensed by the enterprises. And it is an enterprise task to develop an internal mechanism capable of transmitting the market effects.

Dispersing the prejudices would be important too. Unfortunately, the enterprise special tax decree introduced in January is not helping in this.

8984

CSO: 2500/480

HUNGARY

#### AGRICULTURAL GOALS FOR 1985 OUTLINED

Budapest FIGYELO in Hungarian 1 Aug 85 p 3

[Article by Dr Imre Kovacs: "Agricultural Policy '85"]

[Text] Hungarian agriculture and the Hungarian foodstuffs industry—the foodstuffs economy—have gone through significant changes in the almost three decades past. Agriculture especially achieved a spectacular development. According to the calculations of the KSH [Central Statistics Office], in comparison to the production level of the agriculture of the 23 countries of Europe, we stood in 12th place in 1969—1971, in 11th place in 1974—1976 and in 9th place in 1979—1981. Knowing the achievements of the 1980's we can hope that this closing up with the front—runners continued in later years as well. Our situation is even better in production per inhabitant. For example, in 1981 we stood first in poultry, second in grain and eggs and third in pork.

If we acknowledge what efforts were made in every country of our continent to increase foodstuffs production then this gradual but continual progress must be considered worthy of respect. With this development the foodstuffs economy became a stabilizing factor for the national economy. In 1984 it provided 27 percent of the gross national production of the country and 20 percent of the net production. About two thirds of the foodstuffs make possible a balanced internal supply; one third is exported. Foodstuffs export provided 23 percent of Hungarian export while agriculture and the foodstuffs industry took approximately 6 percent of all import.

A fundamental and positive change also took place in the budgetary links of the branch. In earlier years supports for agriculture and the foodstuffs industry regularly exceeded what they paid in, in recent years they balanced one another, and in 1984 the budgetary balance closed with a payment in surplus.

These achievements were made possible by the agricultural and cooperative policy which has been followed consistently since 1957. Since it was announced it never promised easy successes—but it always surely indicated the direction of progress and ensured the conditions for honest work. When necessary this policy was stable (for example, in the priority of the

development of the large socialist operations, in paying attention to the branch peculiarities, etc.) but when there was a need for adjusting to the requirements of the age it did not hesitate to innovate. This stability and innovation, and the good work of the enterprises and cooperatives, meant that foodstuffs production was able to develop in past years even amidst management conditions which were becoming more difficult. Both agriculture and the foodstuffs industry are expected to meet the original production prescriptions of the Sixth 5-Year Plan, even to overfulfill them for a few products. The increase in net production in agriculture is growing at a rate exceeding that of gross production and exceeding what was planned.

#### Warning Signs

Recently, however, a few stress points have appeared in the favorable overall picture which have given cause for disquiet among producers and those sympathetic to our agricultural policy and even in leading political bodies. There were those who talked about a break in the continual development thus far, even those who spoke outright of a crisis in our agricultural policy. We can state that there is no question of a recoil in agriculture as a whole, but a number of signs (the decrease in animal stocks, milk production, area planted in corn and industrial and service activity) indicate that we are again going through a period when we must act, because more is involved than the customary reaction to increasingly difficult economic conditions. For this reason there was a need to precisely determine the stress points and to remedy the problems. Government organs performed the necessary review and now the appropriate bodies of the party have dealt with the theme in accordance with its importance -- as they always did earlier when it was justified -- and have passed a resolution.

In recent years the foodstuffs economy has come under strong market pressure. On the one hand this appeared in product sales on the world market in that the worsening in the terms of trade became permanent. On the other hand the prices of materials and tools of industrial origin used in production increased at twice the rate of producers prices for foodstuffs. At the same time the tightening measures deriving from the situation of the national economy affected the producers of foodstuffs too. The drought, lasting 2 years, only worsened the situation. The foodstuffs economy was unable to completely counterbalance this simultaneous pressure from many sides by improving efficiency. Thus the rate of growth of operational incomes lagged behind the rate of growth in production and even decreased in some branches. Profitability deteriorated in animal husbandry, in corn and vegetable production and in the meat and sugar industries.

There was also a decrease in the profitability of the industrial service activities performed by agricultural operations in addition to their basic activity. (In addition to satisfying the just needs of the populace

and public life and creating support capabilities for some regions these industrial service activities have an important role in making profitable the agricultural operations with unfavorable natural conditions.) For the purpose of competitive neutrality in regard to other branches of the economy the production tax on the supplementary activities of the agricultural operations was increased too much, which caused problems especially in the agricultural operations with unfavorable natural conditions.

Certain negative aspects of management strengthened at the same time. Some of the producing operations, for example, responded to the stricter conditions of regulation or management by quickly abolishing the low income (or deficit) branches instead of trying to counterbalance them with improved efficiency. Thus capacity was being dropped faster than they could become competitive elsewhere. In many places the quantity view still reigns; and there are significant differences between the production yields of operations with the same natural conditions.

As a result of all these things, on the one hand, phenomena deviating from the plan appeared in a few branches of production this year and, on the other hand, large differences developed in the management results of the operations. In many areas the front-runners are capable of further development, while simple renewed production is causing a problem for a large number of those managing at a lower level. Management and financial problems are appearing primarily in unfavorable agricultural districts, and especially in the operations of Borsod and Szabolcs therein.

#### Recoil or Development?

The problems, and the circumstance that we stand on the threshold of a new medium-range plan period, made necessary a review of the prospects of foodstuffs production. As a result of this it is possible to establish that the fundamental task of foodstuffs production continues to be good quality supply to the populace, meeting the increasing export obligations and augmenting the national income. Thus agriculture and the foodstuffs industry continue to be of strategic value for the Hungarian economy; with their supply and export activity they continue to be a stabilizing factor and so we must regard the development of them as our important interest.

This requires that the producer cooperatives and state farms, and the household plot and auxiliary farms tied to them by more and more strands, increase their production and harmonize raw material production and processing better than heretofore. At the same time cognizance must be taken of the fact that the requirements and economic conditions did become more severe in recent years, and this process is not at an end. The world economy is going through a change of epoch in which expanding foodstuffs production is faced with a relatively narrowing solvent market, and staying on the market will require efficient work and vigorous adjustment. We must produce a product of such quality and at such an expenditure that it can be sold—under conditions advantageous for us.

This will require putting more productive animal and crop types into production, even broader use of material conserving and energy conserving technologies, technical development and a further modernization of the incentive and organizational system.

The Seventh 5-Year Plan, now being worked out, will define the concrete tasks for foodstuffs production. Each of the plan variants thus far counts on an increase in foodstuffs production, so there is no idea that the significant development of agriculture and the foodstuffs industry thus far should stagnate by intent. The rate of growth may be that which the plan can lay the foundations for with material-technical conditions on the one hand and which is made possible by our readiness to accommodate to the market on the other.

Our economic interests justify a rate of growth near to that thus far. In the course of this we should think along the following chief lines:

- --Making broad use of the possibilities the production of grain should be developed so that the rate of growth up to now will continue throughout the time of the medium-range plan, and so that ratios between grain and meat production should develop in a way best meeting market demand.
- --In fruit and vegetable production there is a need for a significant improvement in yields, stabilization of the large scale producing area and a strengthening of the division of labor between the large farms and the household plot auxiliary farms. With this and with effective market supervision work--eliminating the unjustified mediating trade--we must strive for a supply to the populace more balanced than it has been.
- --In the marketing of slaughter animals and animal products it is especially important that, in addition to increasing volume, the specific yields and quality parameters approach or reach the leading international level.
- --Foodstuffs processing must be increased--in industry and in the agricultural operations as well. Foreign market and domestic maneuvering ability especially justify a development of packaging, storage and delivery, but the reconstruction of much production equipment is also most important.
- --It is justified to further develop the industrial-service activity of the agricultural operations in accordance with the needs and the efficiency requirements--on the basis of competition equality with the other national economic branches. Preferred development of industrial service activity might be useful in areas with unfavorable natural conditions, in the interest of being able to make a living there.
- I believe that the foodstuffs economy is capable of realizing all these ideas. The resources needed for this must be produced simultaneously through three channels as follows:
- a. The efficiency of enterprise (cooperative) work must be increased. The internal reserves for production growth and quality improvement--which are

still significant on some of the farms--must be mobilized by improving the level of leadership-organizational work and by spreading efficient methods.

- b. The branches or operations where profitability has lagged due to objective causes must be put into a better position with a rational regrouping of material forces within the foodstuffs economy.
- c. There is also a need for gradual central income improving measures in the low profitability branches (cattle, hogs, poultry, corn, vegetables). In the course of this, however, attention must be paid to the requirement that the consumers price level should be held within definite frameworks.

On the one hand the appropriate ministries and chief authorities are working on compiling the Seventh 5-Year Plan; on the other hand they are working on the development of central measures needed to resolve the tensions appearing in production. (Measures have been taken already in the most burning questions—support for the sow outplacement action, dropping the accumulation tax in the case of building cattle facilities, moderating the production tax for some industrial activities.) The responsible organs are striving to see that the central measures should be announced as soon as possible so that the producing operations can count on them when preparing their plans for next year.

As a result of the development of past decades agriculture and the foodstuffs industry have large resources available. They must be developed further in such a way that their role will remain or even strengthen in the future. The agricultural policy confirmed at the 13th congress has produced a good foundation for this. Even now it does not promise an easy task to those working in the foodstuffs economy. On the contrary, it leaves no doubt that efforts even greater than before will be needed here as in every area of life. But it may be reassuring for those working in agriculture and the foodstuffs industry—and for broad public opinion—that the government and the leadership of the party highly esteem the achievements of our agricultural policy, consider further progress absolutely necessary and, in the interest of this, intend to continue to provide the conditions for honest work.

8984

CSO: 2500/480

- HUNGARY

#### CONFLICTS OF INTEREST IN CROP PRODUCTION SYSTEMS

Budapest MAGYAR HIRLAP in Hungarian 23 Jul 85 p 7

[Article by Andrea Gallai: "Who Takes the Profit? Conflicting Interests at Szekszard"]

[Text] Hardly a state farm or producer cooperative exists which is not a member of some kind of crop production system. But can these systems meet the growing requirements of the farms? Is it true the conflicting interests, which are surfacing with increasing frequency, obstruct the development of higher level work?

The dynamic phase of development in Hungarian agriculture was interwoven with the development and work of production systems. At first, a large vanguard farm began to help the neighboring farms with machinery and technology. But an increasing number of farms demanded a more developed, industrial-type production. The cadre of specialists at one farm could no longer satisfy the multiplying requirements both in machine supply, technological adaptation, species and fertilizer use, and in expansion work. Therefore the system's center was created which started to operate independently of the system. These centers created their own apparatus, but their actual dependence on the so-called property management farm which created them did not come to an end.

And now basic conflicting interests may arise in various areas. The system's center is in a very difficult situation. Its management must mainly satisfy the demands of the member farms, and must firmly represent their points of view. And it must do all this in such a way that the interests of the property management farm are not damaged. But the interests of the member farms and the property management farm are also in conflict. The members want to develop through the services of the system. But the property management farm is frequently interested only in the profit that is made at the center, or more precisely in withdrawing this profit. This is the reason why more production systems have recently been choosing the joint enterprise form.

#### Tangled Affair

Recently the member farms of the KSZE [Socialist Cooperation in Corn Production, at Szekszard], voted in favor of a transformation. However, a special meeting of the directors' council did not arrive at a decision because the law and the maze of paragraphs admonished the managers of the member farms who were present to exercise caution and deliberation.

Csaba Lakatos, the KSZE director, was against talks. Why? As it is, there are too many tangled affairs, too many conflicting interests.

But everyone could hear at the meeting which was held at the initiative of the member farms that the members are dissatisfied, and the most obvious and main cause is to be found in the distribution of profits. The activity of the system's center brings profits of several millions, but little of it goes to the members. One could accept this somehow if the money went for the expansion and development of the system's services. But this is not the case. Ninety-four percent of the profit made at the center, or about 52 million forints, is taken by the Szekszard Agricultural Combine and invested in the development of its own farm. And those 270 farms which in effect make the profit, receive all in all 2.6 million forints. Their indignation is understandable without particular analysis, for we can witness a very strange practice in socialist cooperation stemming from that name.

#### Impaired Confidence

And if only the profit withdrawal linked to the 700 million forints production value of the system's center were in conformity with regulations! But the view of the members and the report of the system's control committee contradict this. First, they did not differentiate the wealth contribution value of the members—although this is the basis of the profit distribution. And second, the management cost, the so-called property management fee also appears a bit high. The practice is for the property management farm—in our case the combine—to take 0.5 to 2 percent of the profit. But since the property management fee of 36 million forints makes up more than half of the combine's profits, the member farms rightfully ask: what is that 2 percent of?

If such unfair financial practices surface in a collective, it is no longer necessary to analyze why confidence in the property management farms is impaired.

A study has been prepared in the AKI [Agrarian Economy Research Institute] which investigates the possible courses for the development of the KSZE. The study shows—and this is the view of Janos Marton, the director—that the best solution is the transformation of the development system into a joint enterprise. Csaba Lakatos, the KSZE director, stated that the members will support their transformation desire by increasing their wealth contribution. In case of the formation of a joint enterprise, the combined wealth would be increased by 143 million forints by 1988. And the profit would not go to the one farm which is in an exceptional situation. The greater part of the profits would serve the development of the joint enterprise, and a smaller part would go to the member farms on the basis of the wealth contribution and services used.

And the independence of the members and the relationship of the now actual partners will be the guarantee that the production system will not operate less well in the future and the achievements will not be less. For they will not be earning high profits for others now, but will be working for themselves and

their own prosperity. Although the profit must be made on a given farm, on one's own farm, it is not a matter of indifference—once you are a member of a cooperative—how the work there is recognized. And one other thing: as Csaba Lakatos put it, the production is not a property management farm or a system's center, but the network of the intellectual capital which has been accumulated and developed in the system's center and in the 270 large farms belonging to it.

#### Solution Needed

This network can be motivated and its potentials exploited only if everyone gives his best knowledge in the interest of the collective prosperity. If the good experiences are rapidly diffused and the joint thinking brings new results, the production system will have found a resource which will lend a new upswing to the work. Neither the farms nor the agrarian subbranch as a whole can give up this power which offers and provides renovation.

A solution is needed as quickly as possible in the interest of maintaining a well-working system promoting the work of 270 farms.

#### [Boxed Text]

The BKR [Baja Corn Production System] became a joint enterprise 3 years ago. Prior to this transformation the property management Baja Agricultural Combine was managed between 1978 and 1981 by four manager directors. Most of them invested in their own farms that portion of the profit made in the system's center, and thus the BKR suffered in practice from a shortage of money and had none for development purposes. But the 17\_ partners were not satisfied with the level of services. It was they who started the initiative to leave the combine. Finally, in 1983 the 114 member farms with a joint wealth contribution of about 25 million forints established the joint enterprise. Their machine trade increased from several millions to 160-180 million, and their parts trade more than doubled the figure of 76 millions before the transformation. The machine trade is now supplemented by the license program which was introduced a year and one-half ago under which the value of the licensed machinery exceeds 250 millions. Last year the system, which includes 131 and 32 partners, received 11-12 million forint for its own development, and the members received 8-9 million forints of the profit. Dr Lorinc Matos, the managing director of the BKR informed us that as of January of this year the system which has developed as a joint enterprise has considerably expanded its area of activity.

#### [Boxed Text II]

It was 12 years ago that the Babolna Agricultural Combine (at that time it was still a state farm) realized that which others are still only thinking of. They voluntarily gave up the property management that is still so profitable for others. Why? Two managers of the IKR [Industry-type Corn Production System], Pal Hamori, development director, and Zoltan Tegalas, economic director, believe: "Here the system proprietor of the Babolna farm actually gave what an association needs most: its intellectual capital. It did not force its own will on the system, it did not dictate. It created something, it helped in

its work, and then it allowed every participating farm on the basis of independence to give its best work. But the condition for this is independence." In the first year following the establishment of the joint enterprise, one-half of the wealth contribution of the former property management was joint, or about 160 million forints. Last year, of the 265 million forints contributed by 361 members only 5.5 million forints belonged to the Babolna Agricultural Combine. In other words, they became simple members, and it too like any other member of the joint enterprise shares the same in the successes and failures of the management. Of this they distribute 18 millions to the members following taxes. The basis of the distribution is on one hand the wealth contribution and on the other hand the production increment that is achieved.

6691

CSO: 2500/475

HUNGARY

## PERSISTENT AGRICULTURAL PROBLEMS NOTED

Budapest FIGYELO in Hungarian 1 Aug 85 p 3

[Unsigned article: "Constant Problems, New Conditions"]

[Text] The agricultural branch of the Hungarian economy is not free of problems and difficulties either. In an article titled "Forty Years of Hungarian Agriculture" in issue No 5, 1985, of KOZGAZDASAGI SZEMLE. Pal Romanyi says that one of its most serious problems is that the differences among our farms are a good bit greater than justified by the differences in their local production conditions. It is alarming that there are many operations with a low degree of efficiency. There are sometimes 100 percent differences between the yields, management level and financial results of neighboring farms. In most cases the production conditions do not justify these differences. The better farm does not manage with land as much better as its results are better, and vice versa.

Farms managing amidst circumstances substantially worse than the average—the farms with so-called unfavorable natural conditions—get special developmental fund support, enjoy tax concessions and partake of price supplements. Now the Hungarian price system ties the achievement of average profit to average conditions. The activity of one who manages under conditions worse than the average—and especially in the case of one who manages under substantially worse conditions—is usually deficit activity. Since a deficit involves condemnation it is not permissible for the management of anyone to become profitless because of conditions independent of him. So we consider it important to give special treatment to farms with unfavorable conditions.

Another big problem of Hungarian agriculture is that it produces relatively expensively. In many cases specific material and energy use are greater than justified. The cost of purchased industrial tools and materials is increasing. Animal husbandry provides the most striking example of the possibilities; here our farms are among the European leaders in live animal production per capita, but not in regard to fodder use indexes. The results are very weak in pasture and meadow management. And protecting our basic national treasure, producing land, leaves a great deal to be desired.

The third area with many problems is the background industry for agriculture, and the most secure placement and processing of agricultural products, that

is agricultural trade and the foodstuffs industry. The domestic machine industry satisfies only 40 percent of the demand of the agricultural operations. Deliveries are often delayed and the parts supply is defective from time to time. Packaging materials and good storage are important conditions for export, and there are things to be done in this area as well.

In Hungary also one of the most important natural treasures is producing land. Because of our poverty in minerals the producing land actually represents a greater part of our national property than the value of all the minerals. And yet we do not take care of the land conservingly or really rationally.

In the past 20 years the agriculturally cultivated area has decreased by 17 percent, one might say to an alarming degree. In addition to the necessary afforestation we can also find some wasteful use.

The agricultural population will decrease with the producing land--inevitably in the long run. Although it seems to contradict this that in the past 4-5 years the population has been flowing back into agriculture--though not in large numbers.

We must reckon with the fact that agricultural expenditures will become more and more dear. Technical development, science, research and putting them into practice cost more and more. The assets needs of agriculture are increasing also. And all of this requires a more profound economic thinking and analysis from agricultural experts for an efficient counter to the rising costs. It must be seen also that a very vigorous competition has developed on the domestic and international markets. One can compete effectively only with good quality products, attractive in appearance and packaging and rich in terms of their inner content.

8984

CSO: 2500/480

# VICE-MINISTER REVIEWS POLISH-SOVIET COOPERATION

Warsaw RZECZPOSPOLITA in Polish 7 Jul 85 p 2

[Interview with Vice-Minister W. Gwiazda by Tomasz Bartoszewicz: "Partnership and Cooperation. 40th Anniversary of the First Post-War Trade Agreement between Poland and the USSR."]

[Excerpts] on 7 July, 40 years will pass since the signing of the first post-war Polish-Soviet trade agreement. In connection with this anniversary, RZECZPOSPOLITA's correspondent requested an interview with the vice-minister of foreign trade Wladyslaw Gwiazda. [...]

[Question] It has been 40 years since the establishment of official, contractual trade relations. Obviously, it makes no sense to compare the amounts of trade; they simply involve quantities on a different scale. Nevertheless, what, in your opinion, is comparable throughout the period of those 40 years?

[Answer] The principles on which we have based these relations are identical. They are characterized by partnership character and cooperation, and also by mutual benefits. Thanks to these principles neither side loses on the trade, and both benefit.

On various occasions I mentioned benefits for the Polish side that flow from trade and economic cooperation with the USSR. In order not to repeat myself I will only remind you that imports from the USSR have a decisive importance in supplying raw materials to our economy. We have been, and continue to be, able to rely on the favorable attitude of the USSR to our needs and various difficulties which we have had to confront. Recent evidence of this includes, among other things, Soviet agreement for a long term imbalance in trade, financed by long term, low interest credits. Thanks to this we can continue to import from the USSR more than we export.

Trade and cooperation with our country are also beneficial for the Soviet side. We are an important supplier of many machines and equipment for the Soviet economy; we build complete industrial objects in the USSR; we participate in many cooperative ventures. Despite all the difficulties we are still an attractive economic partner for the Soviet Union, even if our attractiveness temporarily diminished in the early 1980's.

[Question] What are we doing then to improve our attractiveness?

[Answer] Let me begin with saying that in the recent period we have noted a fast increase in trade which, in and of itself, is attractive. In 1984 trade with the USSR reached a value of 11,671 million of transfer rubles. This means increase of 15 percent in comparison with 1983, including 13.6 percent growth of exports and 17 percent growth of imports. This year the trade should exceed 12 billion rubles, including R5.7 billion of exports and R6.4 billion of imports. Everything points to the fact that contractual projections will be fully met, and maybe even exceeded.

Our attractiveness as a trade partner for the USSR is largely determined by on-time fulfillment of contractual obligations in export. I would like to mention in this context that we undertook numerous efforts to catch up with delays of deliveries which were caused this year by winter troubles. As a result, in May and June we noted a clear improvement in making deliveries.

[Question] It seems then that in 1985 we will achieve a good starting basis for a long-term trade agreement with the USSR for 1986-1990. When can the signing of this agreement be expected?

[Answer] The planning commisions of both countries are currently working intensely to coordinate socio-economic plans for 1986-1990. It was decided that this work should be finished by fall of this year in order to sign the long-term trade agreement which depends on the coordination of plans before the end of this year. Everything points to this goal being achieved. An importance stimulus was given by talks at the 40th session of COMECON in Warsaw, where a lot of time was devoted to the question of coordinating plans.

Without anticipating the final outcomes of planning and trade talks, I would like to express a conviction that during the next 5 years economic cooperation and trade between Poland and the USSR will intensify further. Only in cooperation with this partner, which accounts for one-third of our foreign trade, can we solve the complicated problems confronting our national economy.

#### POLISH-YUGOSLAV ECONOMIC PROTOCOL DRAFTED

Warsaw TRYBUNA LUDU in Polish 10 Jul 85 p 2

[Polish Press Agency dispatch from Belgrade: "Concerning the Main Direction of Economic and Scientific Cooperation Between the PRL and the SFRT in 1986-1990."]

[Text] Pointing to the fact that economic and scientific cooperation between Poland and Yugoslavia has good traditions and develops according to the principles of equality and mutual benefit, the protocol emphasizes the importance of meetings and talks between the prime ministers concerning further growth of cooperation. The document positively assesses the results of economic and scientific cooperation in 1981-1985. The fact that total trade in these years is expected to reach \$3 billion is all the more significant since the growth took place in the context of complicated international situation. The protocol cites the positive phenomenon of a relatively high share of cooperative and specialized deliveries in the total trade.

The protocol states that in future development of cooperation in years 1986-1990 one should strive to increase the scope of cooperation and specialization, especially in the manufacturing branches of industry, and also to sign long-term contracts for the exchange of basic raw materials and materials for production.

Regarding as beneficial the results of consultation between the planning organs of both countries, as well as the work of the Polish-Yugoslave Commission for Economic and Scientific Cooperation, the protocol sets the preliminary value of material trade of 1986-1990 at \$4.9 billion. Raw materials and semi-processed goods will dominate the structure of projected deliveries (about 46 percent), as well as machines and equipment (37 percent). The rest will consist of industrial consumer goods (8 percent), foodstuffs (6 percent and construction services (3 percent).

The protocol states that cooperative and specialized deliveries should reach about 25 percent of total trade and lists branches of industry where such exchanges should be most common: automobiles, electronics, electrical technology, cables, tractors and farming machines, construction and roadbuilding equipment, machines and equipment for light and food industry, and production of household goods.

In the protocol much importance is attached to the exchange of steel products, chemical stocks and chemicals, coal (including our coking coal in exchange for Yūgoslav corn and alūminum), ferrous metals [i.e., copper, zinc, etc.], non-metallic raw materials, and fireproof materials.

Cooperative production of energy devices, carried out on the basis of a long-term cooperative and specialization agreement will be expanded. Both sides expressed interest in the development of cooperation in construction industry and in joint ventures on third-country markets, as well as in communication industry, transport, and tourism.

The protocol strongly emphasizes the need for intensification of scientific and technical cooperation between both countries, especially in the branches of economy that are regarded as priority in order to achieve progress in this area. Included among them are also consumer goods and food industries.

Both sides agree that the basis for drafting and signing of the agreement concerning mutual deliveries of goods and services in 1986-1990 has been created.

## INDIA INTERESTED IN SHIPBUILDING PROJECTS

Warsaw ZYCIE WARSZAWY in Polish 6-7 Jul 85 p 6

[Unattributed article: "India Interested in Our Shipbuilding Industry; 25 Years of 'Indopol' Cooperative Shipping Company; Cooperation in Shipbuilding"]

[Text] During a visit to Poland of several days, Zhiaur R. Ansari, minister of shipping and transport of the republic of India, had several meetings and conversations at the Bureau of Maritime Economy, the Steel Ministry, and the Transport Ministry. He also visited shippards in Gdansk and Gdynia as well as a container terminal.

At the end of his visit in Poland Minister Ansari met on July 5 with journalists. As he said in his introduction, the direct reason for his visit was the 25th anniversay of the Polish-Indian Cooperative Shipping Company "Indopol." This enterprise organizes maritime transport between our ports and the Indian continent. Polish Oceanic Lines has two shipping lines: container ships go to Bombay and bulk cargo ships sail on the so-called Eastern line.

The Indian guest praised the activity of the company, and stressed that present talks should lead to broader and more effective cooperation between both partners. It was recognized that more frequent contacts between the interested parties are necessary.

The "Indopol" anniversary merely determined the date of arrival of the Indian delegation. The experts accompanying Minister Ansari talked about broader issues. Among the more important issues is the development of container sea transport. Both sides are interested in enlarging the fleet for this type of shipping; in both countries much work is required to prepare the ports properly for container service. The partners are also interested in eliminating the competition from other shippers on profitable transports.

No less important was thinking about building up the Indian fishing fleet. India seeks trawlers with catch-processing facilities, fishing ships, and refrigerator ships. It turned out that what Poland has to offer in this area of interest.

The most interesting proposal, and with the best prospects for realization, seems the proposal to cooperate on shipbuilding. It is difficult to disucss

the details which will be the subject for experts, but both Minister Ansari and Jerzy Korzonek, head of the Bureau of Maritime Economy, as well as representatives of the Ministry of Steel and Machine Industry [possibly MHiPM] informed the journalists about the preliminary premises for cooperation.

So far India bought 15 ships and many ship engines from Poland. However, Indian shipyards, both state-owned and private, are interested in cooperation in building ships. First suggestions point to the possibility of buying from Poland two or three large mass-cargo ships, to be followed by our side providing access to technical documentation for building further ships in the shipyards of our partner. The possibilty of using Polsih experts in shipbuilding and shipyard construction, as well as purchases of ship equipment were also discussed. Finally, there are possibilites of selling jointly built ships to other countries.

12503

TASK FORCE EYES EROSION OF ECONOMIC REFORM LAWS

Warsaw ZYCIE GOSPODARCZE in Polish No 21, 26 May 85 p 2

[Article by Irena Dryll: "Paragraph Against Paragraph"]

[Text] In the new economic model, the law is like a reform locomotive pushed by two leading rules: one on state enterprises and the other on workers' self-governments. Their functioning influences a lot of the process to initiate economic reform. Now, in the fourth year since the introduction of both rules in September 1981, one of the reform teams from the Commission for Reform—Team X—has begun to analyze the effects. Implementation of both rules took place during the Ninth Party Congress in the "Directions of Economic Reform". There is no doubt that these rules agree with the political and legal intentions of the Ninth Congress. As states in the report by Team X, authored by Dr L. Stepniak, "We have to evaluate all considerations related to a particular rule or difficulty in its use. We also have to analize that attempts to comply with the principles of the two acts lead to repeated discussions on the foundations of the "Directions of Reform".

Despite obstacles to their initiation--more on this later--the rules on state enterprises and workers' self-government will remain as the foundation of economic reform and thanks to their new solutions, the fundamental influence on changes in the system of economic functioning and administration. The primary meaning of these solutions is that they point out not only the legal framework for enterprise activity, but also for the first time in the history of the Polish socialist economy, they control the range and the form of the administration's influence on the economic activities of the state enterprise and also create a particular legal system for economic functioning. This is--as emphasized in the study--the main consideration for keeping the rules in their present form. Even slight changes in the rules or even new legislation can disrupt the construction of the system. Present experiences point this out. They are good and bad. Nothing new is not born without pain and the above-cited solutions are new. This "new legal standard" has been and is being forced on to the economy in an especially unfavorable period. Both the study and discussions have concentrated not on the ups but rather on the ' downs and what is threatening to the economy. Attention has been placed on threats of various kinds.

The threat of "avoidance" is first and foremost, non-compliance with the rules. As stated in the study, this is not a concern for individual cases of law breaking, but rather the problem is widespread.

A classical example of this threat on a large scale was the appointment of numerous enterprise directors in 1982 through elimination of open competition. Cases like this one--documented in reports in 1983 by the government plenipotentiary--still exist.

In spite of these regulations, some enterprises have been transformed into enterprises for public use. On this background, one can have reservations about court decisions that are very tolerant as regards founders' organs but not so much as regards workers' self-governments.

The laws on enterprises and self-governments take into consideration the specifics of some types of enterprises while dropping small legal regulations. In legislative practice, the specifics of these enterprises have become, however, the basis for too far-reaching restrictions and non-compliance with the rules. "It is a disturbing occurence to broaden the circle of 'specific' enterprises. It also shows the need to take into consideration the 'specifics' of other businesses."

"Temporary" threat. There are a whole series of legal regulations issued during the so-called temporary period which departed from the goals of the reform because of the circumstances in the present economy. The regulations concern above all the enterprises involved in finance and goods, and prices. If we even recognize the need to introduce such temporary measures, we must watch the results carefully, as these measures are interfering with the principles of the reform.

The greatest concern is in the legislation in the sphere of enterprise finance. As stated, "Maybe there is a lack of ideas, but any idea in this sphere cannot be tested long enough because of the changes in the regulations." The policy of "hard money" appears on the one hand as ruthlessness but not the other as relief, subsidy and credit for the enterprise. "From the legal point of view, the control of sales and approval of finances is leading to administrative control of the enterprises, limiting their self-dependence and self-financing, and as a consequence their self-government. As a result, there has been an increase in requests from enterprises to the ministries for relief, subsidies and allowances. The ministries cannot do all of the work, so they want an indirect involvement in administration. This mechanism of returning to the old ways of administration has begun to show up clearly."

The opinion was expressed that whether the money is "hard" or "soft" the financial program is not very good in any case. The principle of self-financing cannot exist in the fullest sense of the word either positively (greater possibilities for good) or negatively (bankruptcy).

Threat "legislation aside" also can be termed "indirect amendments". An analysis of the law issued after September has shown many examples that legislative activity on different administrative levels has made the

functioning of both legal acts either difficult or impossible. Last year, Team X issued an opinion concerning the reform regulations, pointing out that legal acts of a lower level were in conflict with the regulations on enterprises and self-governments. The report emphasized that this is the present situation.

Threat of "legal gap". Some regulations necessary from the legal point of view to "implement" the reform still are missing. Special attention was paid to the absence of a rule on anti-trust, a rule on the Ministry Council, a rule on partnerships, on court regulations (in place of arbitrary rules) and a rule on the need to adjust the "center" of the new system of economic functioning.

Threat of "distrust". This means distrust of what is new. Among others, an analysis was conducted of the functioning of the rule on self-governments brought in the research by the N I K [Supreme Chamber of Control] as regards an evaluation of court disputes. It appears from this analysis that any doubt in the rules is exploited to limit the power of the self-governments. "On this background, many court disputes have ended positively for the self-governments, even though the courts have not been too liberal in this legal matter. The lack of trust in the self-governments does not have a basis in fact as regards the behavior of the self-governments. A change in the climate will help to activate the self-governments, which is in the social interest."

Threat of "amendments". The law on enterprises and self-governments has not been fully implemented because of restrictions imposed on it in July 1983 as a result of the crisis in the economy. This statement sums up the situation. There has been either a suspension in the functioning of the law or one enterprise has not observed it to the detriment of the others. Yet, the law has not even had a chance to spread its wings and there are calls for yet another amendment. (Parenthetically speaking, amendments to the law Article 34, Paragraph 7) have allowed the founding bodies to set the director's salary. This is not encouraging. Thus, the status of the director has been changed, in contravention to the principles of reform. The issue of the director's salary is subject to criticism throughout.)

The tendency for amendments, which up to now has been delicate, has taken on a real form: proposals as to what to remove and what to insert into the two laws. With the authorization of the governmental plenipotentiary, Professor Bar issued a statement on this subject at the 13 May meeting of Team X. As a result, discussions have begun on consolidation and development of the national economy in 1986-1990 as regards changes in the legal bases of enterprises and workers' self-governments. "The weight of the proposals brought forward during the discussions was varied." It was emphasized that "in relation to the proposals put forward for amendments to the two laws, there was criticism that the period of their existence has been too short and the social interest too large just to resolve the complex issues so quickly. There were also arguments for the lack of social readiness to change the proposals or to keep the changes to a minimum."

We read next the following: "In all due consideration, it must be emphasized that in the 4-year period of the existence of these laws, the functioning for

the most part has been in accordance with the "Directions of Economic Reform" and models have been realized in enterprises and workers' self-governments." Because the demands for modification of the rules have implications on the shape of the 1986-1990 plan, "they have to be taken into consideration during formulation of proposals on consolidation and development of the economic system functioning in the future."

Generally speaking, the proposed changes have broadened the authority of the enterprises but narrowed that of the self-governments.

This broadening of authority has concerned full independence in entering into or creating partnerships or associations. It has been decided that not only enterprises can enter them, but also other economic units' e.g., scientific-research institutes. In addition, the unit has the right now to withdraw from associations if it chooses to do so.

## Limitation concerns a few matters:

It has been proposed to change Article 24, Paragraph 1, Point 2 (the rule on self-governments). The workers will now have the right to obtain the annual report and to confirm the financial statement.

It has been proposed that the current regulation Article, Paragraph 1, Point 3--"Decision-Making in Investment Matters"--be changed in the direction of specific type and value; i.e., the enterprise will make cost calculation investments in accordance with its statute and not in the annual plan.

It has been proposed to change Article 24, Paragraph 1, Point 9, which concerns the division of profits and their use. This change should take place because the Council will not have the authority over profits, which can then be reinvested.

It has been proposed to limit the authority of the worker's council to hold up a director's decision that is in conflict with law or rules on self-governments (change to Article 40). The council should have the authority to oppose the decision or even to appeal it. The director can accept the resolution to the problem from the workers' council, which has only the right of protest.

It has been proposed to annul the rules concerning disagreements over the appointment of directors.

It has been proposed to introduce regulations regarding the possibilities for dissolving the self-governments if their actions cause harm to the enterprises or tha national economy. (A similar regulation already on the books has been used only two or three times.)

Generally speaking, it has been recognized that the discussions have been a test to limit the authority of the workers.

Professor Ludwik Bar defended maintaining the status quo in both laws during his discussion before the Commission on Reform on 13 May. "The results of research and all known material does not show the need to have amendments to these laws." The professor stated that the legislature should hold back on amendments and allow for the resolution of problems within the existing laws.

At the March meeting of the Commission on Reform, new ideas for legislative change were thrown out. Today we have a concrete conception of changes.

9807

## DEPUTY ANSWERS CRITICISM OF POLONIA COMPANIES

Warsaw DZIENNIK LUDOWY in Polish 7 Jun 85 p 5

[Interview with the deputy of parliament Longin Cegielski, by Janusz Banasiewicz: "Sentimental and Business Considerations"]

[Text] [Question] Polish-"Polonia" economic cooperation proceeds on two tracks. Trade exchange with foreign enterprises owned by persons of Polish descent is the first track, the second being their direct investment in Poland. What considerations prompt both parties to undertake such cooperation?

[Answer] There are both sentimental and business considerations. It is estimated that the number of "Polonia"-owned enterprises comes up to 6,000 in Canada, 2,500 in Great Britain, 1,000 in France, and several hundred in West Germany and Scandinavian countries. As far as the US is concerned, in the Chicago area alone there are several thousand such enterprises. A segment of these achieve the maximum turnover of capital in their regions, and their owners are looking for new markets, goods and investment opportunities. At the same time, a segment of the Polish community manages important divisions in companies which are sometimes quite large and thus has the opportunity to use its knowledge of Polish realities, economy and language through offering assistance in establishing trade or cooperative relationships with Polish enterprises.

I know many "Polonia" enterprises, and I must state that the search for links with the country of their ancestors is probably the strongest incentive to undertake economic activities in Poland or involving Poland. Some may object that this is not a charitable operation. This is certainly true. However, competitive bidding is the principle in effect in our foreign trade. A foreign "Polonia" company can only be treated preferentially if the rest of the suggested contract is identical. Also, the average profit margin of "Polonia" companies located in our country and paying profit tax is about 10 percent. This is somewhat less than the interest they will receive if they deposit the money in the bank ...

Likewise, in undertaking this form of cooperation, the Polish side is guided by the desire to attain certain goals of national importance transcending extemporaneous economic gains. Reinforcing the economic position of "Polonia"

is in the interest of Poland. The economically strong Polish communities and their position in the society strengthen the economic and political influence of Poland in their countries of residence, influence the shaping of opinions of and attitudes towards Poland. At the same time, the Polish communities are a large market for traditional Polish goods. "Polonia" companies can facilitate our entry into the markets of capitalist countries to which our access is difficult.

[Question] Legislation on the operation of "Polonia" companies located in Poland has been amended twice since 1982. Enterprises already in operation must adjust to the revisions or fold. Don't you think that the lack of stable legal regulations undermines the confidence of our potential "Polonia" partners abroad?

[Answer] Indeed, these regulations are not stable. State enterprises also complain about that. This is a necessary evil. Regulations change in the course of implementing the economic reform and affect the entire economy. It is difficult for them not to apply to "Polonia" companies. Life itself necessitates changes. Among other things, recently a regulation was introduced by virtue of which an organ of state administration confirms the owner's commissioned representative managing the enterprise in Poland. This is aimed at excluding unqualified individuals who have created an unfavorable image for all the companies in the eyes of society through their actions and behavior which sometimes fail to comply with the law.

[Question] However, even the best regulations are implemented by people, and they are not always up to the task. It also happens that "no" is the safest answer to an offer made by a Pole from abroad. In that case, nobody will accuse you of making a mistake or accepting a bribe. In saying that, I would like to refer to the case of Mr. Kobelinski from the US ...

[Answer] W. Kobelinski, a former minister in the US government, submitted an offer to process non-combustible parts of coal and peat in Belchatow in order to produce initially 600,000 tons of natural fertilizer and subsequently tripling this amount. The offer was refused ironically due, in part, to the efforts of the Provincial Association of Agricultural Circles and Organizations in Piotrkow Trybunalski.

Refusing such offers does not serve the interest of Poland. First of all, the Polish economy forsakes considerable benefits it could have obtained; secondly, we undermine the authority of "Polonia" activists in their communities. They come to us despite the views and even sneers of those who do not want anything to do with socialist Poland. In cases of failure, they are fingered as the ones who have been warned and have not had any luck.

I would like to particularly avoid creating the impression among industrialists of Polish descent arriving for the 11th "Polonia" Economic Forum in Poznan that all economic initiatives are doomed to failure. The opposite is the case. I could quote a few positive examples of that. However, this negative example underlines the importance of simple professional diligence and responsibility in making certain decisions.

[Question] The economic reform now underway in Poland which we have brought up in our conversation has its proponents. It also has staunch enemies. The latter do not want to assail the reform straightforwardly, they do it indirectly by attacking "Polonia" companies ...

[Answer] Given that the productivity of a Polish worker in a "Polonia" company here inside the country is 5 times higher than in the socialized economy and 3 times higher than in the cottage industry, it is no wonder that some people are not enthusiastic. Prompt deliveries by "Polonia" companies and an appreciably lower consumption of raw and other materials are a conclusive proof that the operation of our plants can stand a lot of organizational improvement. The productivity and materials' economy at such levels do not appeal to everyone; some are reluctant to pattern their own activities after "Polonia" companies.

It should be noted here that the output of 630 "Polonia" companies last year came up to 80 billion zlotys last year. Seventy percent of the output was allocated for market sales, 14 percent for supplies, 11 percent for services and 5 percent for exports.

[Question] Since we are talking about exports, this was meant to be one of the priorities of these companies. These companies were to bring sizable hard currency earnings to the state. Why is this not the case?

[Answer] It is beyond question that sufficient incentives for the growth of exports are in place. However, it seems necessary to introduce new incentives in order to promote such exports. Said one journalist: "Sheep should be sheared so as not to damage the skin."

[Question] "Polonia" companies are not appreciated by the public ...

[Answer] Journalists are also to blame for that. A certain incident involving one of the "Polonia" companies was discussed in 67 newspapers and journals. It must be stated that this interest is out of proportion if one considers that these companies employ barely 40,000 persons, or 0.25 percent of non-agricultural labor force, out of which 0.4 percent of those with academic degrees. Harmful and permanently proliferated myths on, among other things, "Polonia" companies luring away the best skilled workers and highly trained specialists are nonsensical in light of the above data.

[Interviewer] Thank you for the interview.

9761

#### NEW LAW RESTRUCTURES POLONIA COMPANIES CHAMBER OF COMMERCE

Warsaw ZYCIE WARSZAWY in Polish 7 Jun 85 p 6

[Article by (Ch): "Transformation of INTERPOLCOM"]

[Text] The Polish-"Polonia" Trade and Industry Chamber INTERPOLCOM is undergoing a transformation. It is being transformed from a voluntary body into a mandatory association of owners of foreign-owned small enterprises. This is the duty imposed by the law as amended; at the same time, this will enable the chamber to concentrate more on servicing the enterprises in the ways ranging from supply management and sales to personnel training.

It was stated at the press conference that the chamber is becoming more of an economic organization. A new statute is now being prepared. It will be submitted to the general membership meeting scheduled for late June in Warsaw. The draft statute envisages that only the owners of "Polonia" enterprises in Poland will belong to the INTERPOLCOM. This will exclude commissioned representatives and representatives of social organizations, as well as those Polonia businessmen who do not operate enterprises inside Poland. The status of so-called members distinguished in the development of the "Polonia" economic movement is envisaged for the most distinguished individuals in this group.

It was communicated to the journalists that the organization in its new form wants to continue protecting the interests of owners rather than be an extended arm of the administration. It also wants to go on promoting changes in the legal and economic conditions for the operation of foreign-owned small enterprises in Poland, especially with regard to exports.

Evidence gathered thus far suggests that these companies invest (5.4 billion zlotys in the last year) and increase their initial capital; however, their relative share in exports is declining despite the original assumptions. Not only the owners but the state as well suffer losses due to this.

These issues are waiting to be solved. At the same time, over 70 companies will present an interesting collective exhibit at the Poznan fair ranging from electronics and modern equipment to wood cabins and clothing. Soon after the end of the fair, on 17 June, the 7th General Membership Meeting in the auditorium of the university of Warsaw will generalize the experience gained and adopt a new statute as well as a program of activities oriented largely towards consulting and current servicing of associated enterprises.

ECOLOGY JOURNAL COMMENTS ON NEW WATER RESOURCES PROGRAM

Warsaw AURA in Polish No 5, May 85 pp 3-4

[Article by Stanislaw Wrobel]

[Text] The Department of Environmental Protection and Water Economy has worked out a program for environmental protection and water economy to 1990. The introduction to this document commented on the sparseness of water resources in Poland and the massive fluctuations in cubic metrage (from 37.6 billion cubic meters in 1954 to 89.0 billion cubic meters in 1980). Water resources recurrences taking place 95 percent of the time are valued at 22 billion cubic meters, of which 50 percent flows out from the rivers. Increasing the resources and the level of flow fluctuations into reservoirs does not guarantee that their capacity (2.7 billion cubic meters) will exceed a 5-percent average annual outflow. The effective formation of water resources would require reservoirs at 9-12 billion cubic feet.

Surface water resources are decreasing drastically because of pollution. In all of Poland, only 10 percent of the rivers can be classified as first-class in cleanliness, 31 percent in second-class and 33 percent is beyond classification. In addition, over 300 lakes are becoming sewage dumps. Water coming from mining flows into the rivers contributing to high saline levels. Within a 24-hour period, the mines can drain 5000 tons of chloride.

The scarcity of water resources and water pollution are the cause of water deficits, especially in Bielsko, Czestochowa, Jelenia Gora, Katowice, Krakow, Krosno, Legnica, Poznan, Walbrzych and along the Baltic coast.

The program has introduced the need for water by particular sections of the economy. The prognosis for requirements in 1990 is 19.9 billion cubic meters (in 1983, it was 16.7 billion cubic meters), of which the cities would receive 3.5 billion; industry, 3.4 billion; energy, 7.8 billion; agriculture, 3.6 billion; and the rural areas, 1.64 billion cubic meters (of which .34 billion would come from rural water supply services).

Capital investment outlays for the environment and water economy were given in three variants, taking the prices from 1984. Variant I was 1,219 billion zlotys; Variant II, 933 billion zlotys and Variant III, 761 billion zlotys, of which water economy was stated as follows: 1,030 billion zlotys; 800 billion zlotys and 650 billion zlotys, respectively. The largest amount is earmarked

for water intake and outflow to the cities and rural areas (almost half and half) and also for water pollution control (26 percent and 19 percent in Variants I and III). The next position is for outlays for municipal sewage systems (11-13 percent), for new reservoirs (5 percent) and for flood control and river regulation (4 percent).

It should be noted that in the entire investment plan, only 6 percent of the capital outlays was assigned to air pollution control and 8-10 percent for land preservation.

The water pollution control plan has placed the greatest emphasis on completion of water purification plants and reservoirs already under construction. Among the 117 purification plants earmarked in the next 5-year plan, 42 in the Katowice and Baltic coastal areas will have the highest priority.

In 1986-1990, it is planned to finish construction of 11 reservoirs and begin construction of 7 new reservoirs. If the program is realized as intended, then the capacity of the reservoirs will increase from 2.7 billion cubic meters to 3.5 billion cubic meters. The most visible improvement in the level of cleanliness will be only in the areas cited above.

A look at the plan indicates that the average construction period for reservoirs lasts from 10 to 14 years. The same period exists for one purification plant of average capacity. The program is aware of this situation and money has been earmarked for the strengthening of industry producing equipment needed for water pollution control and general water resources construction.

The program concerning environmental protection was introduced in three variants of different investment outlays. It is worthwhile citing the differences in the expected effects. Variant I has an outlay of 1,030 billion zlotys, which is earmarked for the satisfaction of the most urgent requirements as specified by the departments and regional authorities. Implementation of this variant will enable by 1990 to halt the speed of environmental degradation and improve the existing water quality and supply to cities and the rural areas after 1990.

Variant III, earmarked at 650 billion zlotys, will retain the current level of outlays for the water economy in the collectivized economy. Implementation of this variant will not halt the worsening situation in the water economy nor will it improve water pollution control after 1990. From the above, it is evident that even Variant I will not guarantee a quick improvement in environmental quality.

The Complex Program of the Water Economy to 1990 has to be positively evaluated with respect to the qualitative and quantitative state of water resources in Poland as a barrier to economic development in Poland. Separation of this plan from the economic plan is useful because it gives us the possibility to have a stricter control over the plan, especially in the area of water pollution control.

A study of the Program leads to doubts as to whether the rivers and lakes as elements should not be treated individually but rather as a whole. Doubts are focused also on the proposed damming of the Mazurian Lakes (which is planned for the distant future) because the lakes have been proposed as a national park (which is correct).

In the supplementary map in the program, regions were marked out for protection "in the present and in the future to 1995" and also "in the distant future". Protection of still clean water is difficult to divide into stages because the "distant future" may require steps to clean up polluted waters.

The Program has weighed heavily the mistakes made up to now in the water economy, mainly in the area of long water transfer to areas requiring large amounts of water. The Program also stated weakly that environmental protection is not limited just to emissions and sewage outflows, but also (perhaps the most) to the inefficient use of primary and secondary resources and also energy.

In conclusion, it can be stated that the Program has overlooked the problem of surface water eutrophy in Poland, which has caused the degradation of lakes and disqualified reservoirs as water-intake systems. The article below discusses this issue further.

9807

EFFICIENCY QUESTION ADDRESSED BY PLANNING COMMISSION OFFICIAL

Warsaw RZECZPOSPOLITA in Polish 9 Jul 85 p 4

[Article by Dr. Jozef Zajchowski, deputy chairman of the Planning Commission of the Council of Ministers: "Necessary, But Is It Possible?"]

[Text] The necessity of a decisive improvement of effectiveness of the economy as a necessary condition for the achievement of social and economic goals for 1986-1990 is indisputable.

Many participants in the debate over the variants of the project of National Economic Plan [NPSG] pointed to the fact that this docuemnt is not very convincing with regard to proposing ways to improving the effectiveness of our economy.

What are the main directions for action to improve effectiveness of the entire economy which are proposed in the variants of the project?

First, it is assumed that in the next 5 years processing industry will generally develop faster than mining industry. In practice, the stabilization of coal, steel, and sulphur production is assumed. It is worth noting that an unchanged level of investment outlays is assumed for the fuel and energy complex, irrespective of the variant, so it is difficult to agree with views that this complex enjoys investment preference.

Second, in the individual branches of processing industry, faster growth is assumed for those branches which represent higher forms of processing, e.g., rolled products and quality steel in the steel industry, so-called small-tonnage products and substances in chemical industry, pharmaceuticals, and milk processing in the food industry.

Third, the variants sketch a proposal for directions of technological changes in individual branches and sectors which will insure a decrease in the consumption of energy and materials used for production. One should mention here the beginning of development of the nuclear energy industry, abandonment of the Marten process in steel production, electrification of transport, increase in the share of plastic working in the machine industry, change to dry methods in cement production, increase of production and use of plant protection chemicals and magnesium lime in agriculture, etc.

These proposed directions are based on the already realized investment projects, or slated for projects which have full changes of being undertaken and achieving appropriate results in the next 5 years. Thus they are not merely a declaration of intent.

An important factor in improving effectiveness should be the growth of foriegn trade which should be based, first of all, on the growth of effective exports. A general principle of absolute priority for producers of goods and services for export was adopted. It will find an appropriate expression in the systemic solutions. Priority means access to credits, domestic as well as foreign, for investment purposes, wage and tax preferences, etc.

Improvement of effectiveness, and strengthening of the economy and individual enterprises with innovative technological and construction solutions, will be aided by a changed system of direction of scientific and technological progress. The essence of the changes consist in concentration of research on problems that are most important for the economy, in guaranteeing necessary investment and currency means for selected fields through government orders, and, equally important, the synchronization of research problems with investment projects.

I mentioned those directions for action which will create material conditions for improvement of effectiveness. Systemic solutions, which increase labor productivity and decrease of energy and material demand in production, are no less important.

These solutions have not been presented in the variants of the project. This is because when they were announced, work on their preparation was still continuing. The Poznan conference had not yet taken place. Therefore it was hard to go into details, and in many cases the details were not yet there.

Can one conclude from the foregoing that problems of improving effectiveness have already been solved and one should just wait to get the results? Of course not. It doesn't follow from knowing ways of improving effectiveness that everything will be accomplished. One should never forget that:

--even the best intentions and projects may be frustrated to a greater or lesser degree by unfavorable objective factors, such as world market trends, climatic conditions, or other such events;

--reaching intended economic goals is a social process which depends not only on technical conditions, but also on human attitudes, inventiveness, activization, engagement, and attitudes of people to their work and duties. And such attitudes do not depend solely on whether the plan is good.

12503

POLAND .

MINISTER SUMS UP PROGRESS OF NEW SCIENCE, TECHNICAL AGENCY

Katowice TRYBUNA ROBOTNICZA in Polish 5 Jul 85 p 3

[Interview with Konrad Tot, minister of the Office of Scientific and Technical Progress, by Krzysztof Kuzniewski; date and place not specified]

[Text] [Question] Mister Minister, for over 6 months now you have directed the work of the Office of Scientific and Technical Progress. The creation of this institution was welcomed by all of those who had hoped that the distance in technology between Poland and the highly developed countries would be overcome. Do you still have this kind of optimism or have you become concerned that the task of the office is beyond hope?

[Answer] When I took this position, I was fully aware of the existing tardiness in our position, the conditions and the difficulties. I have spoken frankly about the situation. I have never been afraid of the responsibility.

The law of 3 December 1984 created the Committee of Scientific Matters and Technical Progress within the ministry's council. I can say that the Office of Scientific and Technical Progress and Initiation serves as the staff. Later regulations from 25 March 1985 established the range and course of activities. It is sufficient to look at the program even superficially to understand the extent of our task. There is no doubt that this mission must succeed. We cannot afford scientists and economists to fail; society is waiting for results. I think positively and am optimistic because the initial steps have been successful and team of people I have assembled is good. Most of them are scientists who have experience not only in academia but also in industry.

[Question] But how do you plan to achieve results? The Office of Scientific and Technical Progress and Initiation is small and unlike most departments with which we are accustomed. Maybe you are still in the process of organization.

[Answer] The problems of organization are called "critical mass" and there is the need to get started and get the people working in their particular functions. It is necessary to have minimum personnel. Our office is in this stage. If we compare out situation with similar agencies abroad, then we

really do have fewer people than they do. At the beginning, it really cannot be otherwise and there are several reasons for this. First, we cannot argue yet for more people to those who are sceptical of the success of our mission. Likewise, they will say that the bureaucracy is growing. On the other hand -- I think this is more important -- we would like to utilize more modern work methods so as to cut down on personnel. I think the minimum employment will be a little more than 200 people. This will require, however, that our function -- be it direct or indirect--extend into the department. We can give some functions to research and development institutions. For cooperation we can bring in some functions already within the department; e.g., the Center of Scientific-Technical and Economic Information; the Center for Technical Progress in Katowice; the creative enterprise "Posteor" in Wroclaw with branches in Lublin and Gdansk; and the entire computer network. Very talented and young people work in these areas. We have to create bonds so that under our direction they will feel better than has been the case in the past. We can use their inclination, eagerness and possibilities to the fullest. This is yet still before us. I am convinced that we shall realize our intentions. And remember that we have a small office. Everything will be received with enthusiasm. The team I direct will be instructed to resist both extreme optimism and extreme pessimism. One success or one defeat will not get us away from our goal.

[Question] This goal is still far away. For example, there are financial, organizational and psychological barriers that block technical progress in our country.

[Answer] Indeed, it will be difficult to overcome one, two and three. we also could find a few more. This is one of the hardest matters. I have studied various decision-making theories and also from my own experiences I can say that there are two elements that ensure the success of a venture. First, we must know our current state. Second, the goal must be supported by our knowledge, imagination, progress, statistics and comparison. If both pictures are specific enough, then we should consider decisions that go from one stage to another. Only then can we use certain apparatuses that allow us to overcome complexity. At present, we are working on the existing state. The most important area is tied to scientific progress as requested by the state. In the opinion of people from the scientific arena, the Achilles heel of our economy is the ineffective system of initiating new studies, which has caused our industry to be placed on a bed of thorns. It also is said that industry is afraid to accept ideas, especially now when the economy is functioning. Simply because every innovation is tied to the risk of temporarily diminished returns, enterprises are reluctant to try new things. A way out of this may be the introduction of risk funds for the enterprises so they can experiment.

[Answer] Indeed, in the opinion of some scientists, we have had great results, but industry has not wanted to experiment. But after all, this is only one point of view on this very difficult problem. As always, the truth is in the middle. The cause of failure lies in three areas: science, industry and mechanisms. In industry, the present day dominates the need for perspective. In most cases, the workers through the self-governments are making the decisions for the enterprises. The level of salaries often shows this. It

is still difficult to show people that if they have less today, then they'll have more tomorrow. Another issue. The initiation of so-called technical progress is costly. And very often the enterprise cannot bear this burden alone. Does this mean anti-progress? Not at all. But particular mechanisms have to work and need help from the outside. The risk fund is nothing else than an aid to initiation for which the Office of Scientific and Technical Progress and Initiation has fought. We can already see the first results of our efforts. Not long ago the State Council of Party-Economy in Poznan said that these funds would be created. This will probably be more like a credit than an outright grant. One of the functions will be making a decision with some margin of risk. The other side is the problem of singular initiation, but we have to remember that the small ones are conditioned by the big ones. Here we need a completely different approach. We cannot force anyone during the reform to produce only 100 samples, for example, rather than to mass produce to make more profit. What should we do? We have to expand the network of small plants: experimental plants for production within trade institutions and centers of research and development. Maybe it is time to create science-production centers like "Meraster" in Katowice, for example. This is a good example that we can produce small quantities and then expand to larger production. But such cases can only succeed when there is cooperation among the research institute, the project bureau and the production plant.

[Question] Good, but what happens when the problems come from the initiation stage? It is not everything to see incompetence in perspective.

[Answer] We have to return ourselves to the relationship between science and industry. Very often, what science thinks it is ready to initiate requires a lot of conceptional work adjusted to present possibilities. And then particular bonds have to be made between science and industry. I personally feel that science should take the initiative in initiation processes because often the level of knowledge in certain matters is higher than in the enterprise. Scientists can better maintain difficult situations than can industry. If we are talking about mechanisms, then we must start to create them and continue to research those we already have. Today, we cannot speak about the bureaucracy as every issue must be approached unconventionally. If we talk about unconventional approaches, then people have to be unconventional too. Everything starts with a human being and ends with him. This is why we must create not only initiation funds but also central currency reserves, guaranteed income, tax relief and maybe some privileged salaries. It is important to ensure a good salary to people who work creatively because that is the source of most technical progress.

[Question] Exactly. Necessity is the mother of invention. Unfortunately, this saying is true everywhere but in Poland. Petitions for new patents are too few. The July initiative to have more initiation has not meant much.

[Answer] I personally do not have the same point of view as you. Of course, there is a lot of truth in the statement that the number of patent applications is small compared with the science and engineering potential. Indeed, there are a lot of possibilities that we do not utilize. But we can see them and

the way is short for use. If we look at statistics from the last two years, we can see that the sphere of initiation and invention has improved considerably. And the rule about invention has played its role. And do not forget the recent period of chaos we went through when all past theories and opinions were condemned. This also caused desolation among scientists, engineers and technicians. I know inventors who did not do anything for three years. I am astonished that we have forgotten this. We question, but we do not take into consideration all that happened almost yesterday. The truth is that we have begun to find ourselves. Despite the waste, we have come out of it and are moving forward.

[Question] I can see an optimism in you that many of us lack. At the same time, you are not promising anything.

[Answer] As I have said, I believe in what I am doing. If I did not, then I would not be very happy with myself. Why don't I promise anything? The initial results of our efforts will not be seen for at least two years. We are now planning a 5-year plan and organizing its structure. It will be more profitable to see the realization of our plans in the future.

[Question] There are many opinions that the Office of Scientific and Technical Progress and Initiations is just another ephemera. Vicious people are saying that you don't even have an office nor a sign yet.

[Answer] Those really are malicious people. But why begin by hanging out a sign? Maybe this would improve the employees' frame of mind, but it does not mean that activity has not already commenced. We are now in the Industrial Design Institute and I like it there. Difficult working conditions are yet another sign of the level of our personnel, who came to complete certain difficult tasks.

[Comment] Thank you for the discussion.

9807

POLES, SOVIETS COOPERATE IN MACHINE TOOL INDUSTRY

Warsaw RZECZPOSPOLITA in Polish 1 Jul 85 p 4

[Text] One year ago, close cooperation was established between the Mechanics Machine Tool Factory in Proszkow, a well known producer of horizontal and vertical machine tools, and a similar plant in Byelorussia, the Kirov Plant in Homel.

According to Kazimierz Jedra, the Mechanics Managing Director, during the early meetings of representatives of the two factories producing modern metal working machine tools with digital controls (which perform work of grinders, lathes, milling machines and drill presses) the matter that surfaced first was the increase of production.

Polish representatives were interested in increasing the standardization of selected key components which would also help to lower own costs. The bottleneck in production of "centers" is caused by rotating tables using the "Hirtha" type clutches. Some parts, such as the clutches, are purchased in the Federal Republic of Germany and the teeth cutting on the rack and pinion is done in Finland because of the lack of suitable machines. During the last visit it was determined that that kind of components will be imported from our eastern neighbor and the Proszkow plant will provide to the Soviet partner layouts, replacement palets and sets of tools with controls. It will be necessary, however, to unify the interface measurements first.

It is estimated that thanks to these arrangements there is a possibility that in a few years about 80 percent more than now (up to 120 annually) machining centers could be produced. And practically no investments would be required.

Another, and no less important, subject of conversation was the modernization of current products. The current trend in the world is to create flexible production systems consisting of at least a few "centers" connected by feeders and controlled by computers. Using such systems, the role of human is limited to mounting the details on palets every morning and to programing operations.

To achieve this goal, however, it is necessary to equip each machine with measuring devices which would permit automatic correction of measurements during the machining operation. This is one of the most important items in the scientific part of the signed agreement.

The intermediate point between the modernized center and a large flexible system is an autonomous machining station with a stock of palets. Development work in this area is being done by the Machine Tool Research and Development Center in Proszkow. Establishing a cooperative relationship with the Machine Tool Institute in Moscow, the largest institution of this kind in the USSR, permits us to hope that the work at the Proszkow Center will be accelerated which will help us to close the gap between us and the most advanced countries in the world in the shortest possible time.

.8801

# KOZIENICE POWER PLANT ACCIDENT ASSESSED

Warsaw RZECZPOSPOLITA in Polish 9 Jul 85 p 5

[Unattributed article: "After the Accident in the "Kozienice" Power Plant."]

[Text] The loss of 500 megawatts of power for a few months (this is today's estimate of repair time, a week after the breakdown of the 10th bloc in the Kozienice power plant) will considerably complicate the functioning of our electrical energy system. Energy demand has recently grown very fast; new power becomes available much more slowly. In a few weeks the next 360 megawatt block will start working at the Belchatow power plant. The accident in Kozienice is the reason why instead of growing, the electrical energy balance has decreased.

The breakdown occurred shortly after midnight on 3 July, at 0.38 hours. As was indicated by a so-called black box, similar to ones used in airplanes, in the space of 4 seconds there were first violent vibrations which tore off thick 36mm screws on the pivot bearings, followed by a hydrogen explosion (hydrogen is used as a coolant), oil leak, and a big fire. The roof was quickly destroyed and the turbogenerator was engulfed by flames. Shortly thereafter the white-hot steel roof construction fell on the equipment.

Kazimierz Trybuc was the turbine machinist on duty. His post was very close to the side of breakdown. But neither he nor his colleagues lost their heads. Even before the enterprise firefighters arrived, they managed to extend 5 hoses and began to fight the fire. At the same time steam sources were cut off and the electricians in the control room switched off the voltage. Within an hour the fire was localized.

The repairs started on the same day. A task force was created to rebuild the 10th block.

As Zbigniew Jozefowicz, the reconstruction coordinator, informs us, about 100 people work on removing the consequences of the accident. Specialized brigades from "Elektromontaz" and "Betonstal" are on the site. One of the largest self-driven construction cranes was brought in from Suwalki. In the next few days the brigades will begin to dismantle the machines in order to assess the scale of destruction.

On Monday, 8 July, the minister of the mining and energy industry, Major General Czeslaw Piotrowski, visited Kozienice to see the work on the reconstruction of the 10th block. He expressed his appreciation of people who devotedly work on reconstruction. Jan Wrona, the director of the power plant in Kozienice, received many offers from brigades and work-groups declaring their readiness to help voluntarily in removing the consequences of the accident.

The accident in Kozienice which seriously affected the entire electric energy system, spurred many initiatives among brigades repairing energy blocs in other plants. They offered to speed up their repair work so that the plan of repairs will be fulfilled by the Energy Worker's Day (the second Sunday in September), before the fall-winter season. The brigades repairing the power plant in Polaniec—after achieving their planned goals—expressed willingness to work directly on repairing the 10th block at the Kozienice power plant.

12503

FUEL, ENERGY PROSPECTS TO 1990

Warsaw RZECZPOSPOLITA in Polish 17 Jun 85 p 3

[Article by Zbigniew Wyczesany: "The Limits of Fuel and Energy"]

[Text] At first sight it looks like a paradox. The government has presented to the Sejm and the public three different proposed National Socioeconomic Plans for the years 1886-1990, with different growth rates for national income. But fuel and energy consumption is outlined only in one version.

Various independent scientific centers in recent years have carried out studies on the extraction and processing of energy for economic needs (the Energy Institute, the Institute of Basic Technical Problems of the Academy of Sciences, the Research and Development Center for the Energy Economy, the Planning Commission of the Council of Ministers and the Ministry of Mines and Energy). All of these studies and analyses had similar evaluations of energy needs and possibilities for meeting them. Until the year 2000 there will be no way to ensure unlimited growth in energy deliveries, from the point of view of finances, technology, imports or ecological conditions. Possibilities for getting basic energy substances from Polish sources have already been accurately determined, and basically only those quantities can be taken into account when planning national economic development; and the growth of fuel and energy production to 1990 which have been adopted are in accordance with the principles accepted by the government for energy and fuel development till the year 2000.

One basic conclusion emerges from these studies and analyses: economic growth in Poland will depend on possibilities for getting more energy and reducing the rate of energy consumption of the national economy. This is a complete change in hitherto held ideas of overall decision-making, where energy needs were determined as a function of planned growth of the country's economy.

Let me emphasize again: the whole national economy in its further development must be adpated to the possibilities of the national fuel-energy base. And prospects for further development of that base are limited, in spite of the tremendous amount of funds that will have to be invested in that sphere.

In the next 5 years coal production will increase only slightly, from 191.5 million tons in 1985 to 195 million in 1990. And even that will require work on Saturdays. In spite of relatively rich coal deposits, it is becoming more

and more difficult and expensive to mine them (the richer deposits are being exhausted, mining at ever greater depths is very dangerous). New mines will in fact produce about 18 million tons of coal, but so far, due to depletion of deposits, operating mines are producing far less.

As for lignite, given present technology there is no justification for beginning mining of new deposits. Investments should only be continued in Belchatow and in the Konin region. This would make it possible to increase lignite production from 50.4 million tons in 1984 to 74 million tons in 1990. This lignite will serve energy needs almost exclusively.

As regards natural gas, because in past years the scope for prospect drilling has become limited (mainly due to the lack of drills) new deposits being discovered amount to less than the annual amount of gas being extracted, which does not indicate an increase of gas production in the future. Polish production does not satisfy even half of the economy's fuel needs. The difference is made up by imports from the USSR. Under present agreements it is assured that gas deliveries from the Soviet Union will increase from 6 billion m in 1985 to 7.4 billion m in 1990, in exchange for deliveries of coke. Further increases in gas deliveries will depend on Polish participation in construction of gas pipelines in the USSR, including construction of the Hamburg-Uzhgorod pipeline.

The situation with regard to providing the economy with oil and petroleum products is in general terms well known. Due to limited funds there can be no substantial improvement in this area in the near future. Oil deliveries from Payment Zone II [capitalist countries] are tentatively estimated at 3 billion tons for 1990.

The increase in power production for the next 5 years is limited to 5800 MW, of which 465 MW will be produced by the first nuclear power plant at Zarnowiec. The fact that our own national fuel base is insufficient to meet our energy needs is the main reason for the development of nuclear energy, which, according to many experts, lags 10 to 20 years behind needs.

Meanwhile the fuel and energy needs of individual sectors of the economy are far beyond the capacity to meet them. At the same time there is no shortage of people who have doubts about plans for development of the fuel and energy base, questioning the size of initial investments for this purpose, who consider this program the brainchild of technocrats and the industry lobby, as well as of those who support "steering the economy by hand."

All these comments and arguments about the supposed privileged position of the fuel and energy base depart from reality. It is impossible from year to year to change the structure of the economy and drastically reduce the rate of energy consumption. This is a long-term and expensive process. In all government documents and proposals dealing with the fuel and energy base the need is emphasized for simultaneous and profound changes in equipment and technology of production to conserve fuel and energy.

So far, efforts aimed at reducing excessive energy consumption have not achieved significant results partly because there have been none of the necessary economic mechanisms. Also because economic decision-makers at all levels are not aware that the fuel crisis in Poland is not something that somebody thought up, it is real. Its full intensity has not yet become apparent only because for the last few years the economy, and especially industry, has been operating at such a slow pace.

Getting back to the single version for the development of the fuel and energy base and the three versions of the NSEP for 1986-1990, since the prospects for fuel and energy supply are already limited, and since that is the basis of the development of the economy as a whole, what suppositions are the three versions of the NSEP based on?

The basic factor making the versions of development possible is the predicted changes in the area of more efficient energy and fuel consumption. Work on the draft of a comprehensive government program for more efficient use of energy and fuel is in the final stages (this program will be an obligatory supplement to the NSEP). The program will not only set targets in this area, but will also determine technical and financial resources, as well as capacities for carrying this out and the appropriate institutional mechanisms. Under the program, savings will have to amount to more than 10 percent of overall energy needs forecast for 1990.

Given the present state of our knowledge, primary fuel consumption for 1990 is estimated at 183.5 million tons of coal equivalent. In this situation the different versions of the NSEP are based on the need to save substantial quantities of fuel and energy. Thus, for version no. 1: 16.4 million tons of coal equivalent, for version no. 2: 21.6 million tons, and for version 3: 25.8 million tons. Clearly, the more ambitious the version, the more effective fuel and energy conservation will have to be.

Tasks in the area of more efficient use of fuel and energy have been divided into two groups. The first consists of measures of an organizational and technical nature, such as limiting use, strengthening inspection and control, economic sanctions for energy wasters, etc. The second includes structural changes in the economy, such as improving efficiency and increasing coordination in production of electricity and heat, automating electricity transmission, electrifying the railroads, new energy-saving sources of light, reducing heat loss from buildings, expanding the output of energy-efficient products in many areas of production, greater use of diesel transport, etc.

These subjects are not treated only as slogans and guidelines for development. Considerable amounts of capital are also necessary. The important thing is that for the first time in our country we will begin to direct our efforts to improving energy efficiency and reducing waste of fuel and energy. How fast we can restore consumption levels and create better conditions for development after 1990 will to a great extent depend on society's acceptance, and then fulfillment, of tasks in the area of streamlining fuel and energy use.

9970

CAPITAL EXPANSION NEEDS OF FUELS, ENERGY INDUSTRIES DEFENDED

Katowice WIADOMOSCI GORNICZE in Polish No 1, Jan 85 pp 10-14

[Article by Krystyna Wypior: "Capital Stock Replacement in the Coal Industry Against the Background of the Fuels-Energy Industry in Poland"]

## [Text] Introduction

Problems relating to replacement of capital stock, especially on a large-scale basis, in the industrial branches and sectors, do not attract special interest in Poland. This is shown, for example, by the dearth of publications dealing with this problem, of a theoretical as well as an empirical nature, and particularly as concerns an analysis of the situation in specific branches of the national economy. And, after all, if the Polish crisis is to be diagnosed and the remedies for treating it are to be found, this kind of examination may be fundamentally important, primarily if it relates to the so-called "national" industries which are the basis of the economy of a given country. That kind of industry for Poland, is the fuels-energy industry. Yet, thus far, except for statistical data published by the Main Office of Statistics<sup>1</sup> and Z. Broda<sup>2</sup>, no other publication has appeared on the subject of the replacement of fixed capital stock in the fuels-energy industry.

Z. Broda, in his report, included an analysis of empirical data relating to the years 1965 to 1972. The Statistical Office data, on the other hand, do not contain most of the sector coefficients of capital stock replacement. The amount of entry data essential to calculating these coefficients is also limited. This may be one of the reasons why further studies were not made and nothing was published on this subject. The foregoing article aims to give a comprehensive evaluation of the capital stock replacement process in the fuelsenergy industry in Poland, in the light of capital stock replacement indicators. The subject of the analysis are statistical data published by the Main

<sup>&</sup>lt;sup>1</sup>Investment and Fixed Assets Statistical Yearbooks for 1945-1966, 1967, 1968, 1970, 1971, 1972, 1973 and Industry Statistical Yearbooks for 1945-1965, 1966, 1967, 1968, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982.

<sup>&</sup>lt;sup>2</sup>Z. Broda, "Main Tendencies in the Capital Stock Replacement Process in Polish Mining," Scientific Reports of the Mining and Metallurgy Academy, Rpt 2, Krakow, 1974, pp 41-50.

Office of Statistics and data made available to the author from working materials. They relate to the years 1974-1982. Their collection, assembling and processing required a certain research procedure aimed at reducing the obtained and differentiated data to comparable amounts. This procedure, in view of the limitations of the article, are not described. They are identical; or almost identical, with the principles used by the office mentioned. The treatment of the data for 1974-1982, however, was aimed at showing the situation as regards capital stock replacement during a period of a kind of prosperity, through the growth of the crisis in the economy, until the full emergence of the crisis. Furthermore, these data have made it possible to show certain specific features of the fuels-energy industry as related to the replacement process.

The article deals with the degree of consumption and the coefficients of liquidation, renewal and replacement of fixed capital assets in the individual branches of the fuels-energy industry, with special focus on the coal industry. Data pertaining to capital assets in their entirety and their more important types (buildings and structures, machinery and equipment, means of transport) were analyzed.

The report ends with observations on the effect of newly introduced economic mechanisms (for the years 1983-1985) on the capital replacement process.

# 2. Trends in the Degree of Consumption of Fixed Assets

The degree of consumption of fixed assets in the fuels-energy industry during 1974-1982 is shown in Fig. 1. During the period examined, in the entire fuels-energy industry, the total amount of consumption of fixed assets grew (from 138,459 million zlotys in 1974 to 295,417 million zlotys in 1982), but large differences appear in the individual branches and type groups.

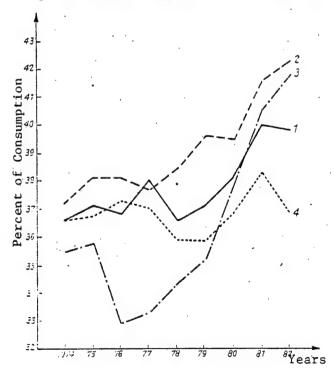


Fig. 1. Degree of Consumption of Fixed Assets

- 1 Fuels-energy industry,
   overall
- 2 Coal industry
- 3 Fuels industry
- 4 Power industry

Thus, in the coal industry, in the buildings and structure group, since 1977 the level of consumption remains essentially unchanged (amounting to an average of 33.3 percent). A high degree of consumption, with a steady growth rate rising from 30.9 to 54.3 percent (from 1974 to 1982) is noted in the machinery and equipment group. This is the result of more intensive operation of equipment than found in other branches, and particularly in the hard coal industry. The demand for hard coal, as we know, increases each year. It satisfies approximately 70 percent of the country's fuel requirements, while brown coal meets only 7 percent, petroleum products 14 percent, and natural gas 6 percent. A regular growth in consumption of fixed assets (from 35.5 percent in 1974 to 41.8 percent in 1982) is also observed in the fuels industry. In the buildings and structure group, consumption is at the 31.4 percent level, with a rising tendency after 1980, reaching 34.7 percent in 1982. The high degree of consumption of transmission pipelines, bore-holes, etc., is responsible for this increase. A similar situation appears in the machinery and equipment group, where the lowest degree of consumption was recorded during 1976-1977, an average of 27.4 percent. On the other hand, there was an overall drop in the degree of consumption of fixed assets in the power industry during 1977-1978. After a period of growth during 1980-1981, it dropped again in 1982 and settled at the 1974 level. This general tendency is reflected in the buildings and structures group, as well as in machinery and equipment. This is due to a gradual increase in capital assets in both type-groups of this branch of industry. New highcapacity power units were started up and the value of the installed capital assets was also very high. For the transportation-means group a relatively high degree of consumption of these means (in comparison with other type-groups) is typical in every brach of the fuels-energy industry, but since 1977 a gradual drop in the degree of their consumption is observed, with a very large drop in 1982.

The characteristic tendencies occurring in the particular branches, as discussed above, are reflected in the summary indicators for the entire fuels-energy industry. During 1974-1979 consumption of capital assets was 37 percent, amounting to 38 percent in 1977. A growth in consumption occurred in the following years, with a slight decline in 1982. Consumption of buildings and structures reached an average of 32.6 percent (in the coal industry this average was 33.6 percent, in the fuels industry 31.5 percent, and in the power industry 31.2 percent). The lowest degree of consumption of machinery and equipment occurred in 1978, amounting to 42.1 percent, while the highest occurred in 1981 (49.7 percent) and 1982 (43.5 percent).

It appears from the above that the last 2 years of the period analyzed are the poorest for this industry, and particularly for the coal industry. It becomes clear at this point that fixed production assets are becoming obsolete, that the period of their operation is being extended, and that there is an insufficient increase in new capital stock.

## 3. Coefficients of Liquidation of Fixed Assets

Fig. 2 shows trends in the coefficients of liquidation of fixed assets in the fuels-energy industry.

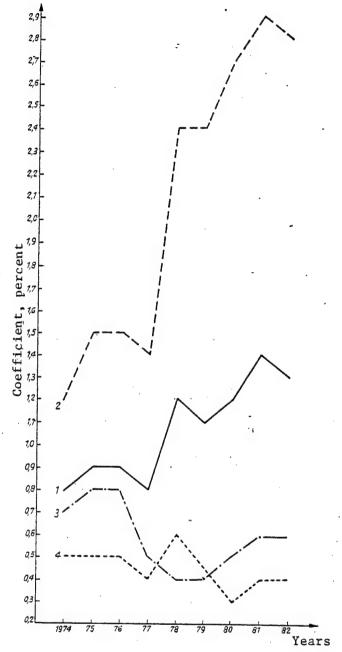


Fig. 2. Coefficients of Liquidation of Fixed Assets

- 1 Fuels-energy industry,
   overall
- 2 Coal industry
- 3 Fuels industry
- 4 Power industry

The coal industry, regarded as the base of the fuels-energy industry, has the highest liquidation of fixed assets indicators. In the period analyzed, a gradual growth is observed, from 1.2 percent in 1974 to 2.9 percent in 1981, while a clear growth in the coefficient occurs at the turn of 1977-1978. In the machinery and equipment group it stops at 2.5 percent in 1974 and at 6.5 percent in 1981. This is due to the high intensiveness of the operation of the equipment in this branch. This phenomenon is especially evident in 1978 (7.1 percent) and in later years. In the fuels industry, on the other

hand, the coefficient of liquidation of fixed assets during 1975-1976 does not exceed 0.8 percent and amounts to 0.4 percent in 1978 and 1979. In this branch of industry, transport means show the highest indicators of liquidation, just as in the coal and power industries. The power industry has the lowest indicators of liquidation (an average of 0.4 percent). In the buildings and structures group, this indicator is relatively stable, but in the machinery and equipment group it shows a clear drop starting in 1978. It seems, therefore, that the overall levels of coefficients of liquidation in the fuels-energy industry are definitely affected by the coal industry, whose coefficients of liquidation of capital assets in the particular groups are higher than their counterparts in the entire socialized industry. The average liquidation indicator in the fuels-energy industry during the period analyzed is 1.7 percent and is 0.7 percent higher than in the entire socialized industry. A similar tendency appears in the individual groups. In the buildings and structures group it is 0.4 percent, while in socialized industry it is 0.3 percent. However, the situation in the machinery and equipment group is not good. In socialized industry the liquidation indicator amounts, on average, to 1.4 percent, with a tendency towards stabilization; however, in the fuels-energy industry this indicator increases from 1.1 percent in 1974 to 2.6 percent in 1982. The growing value of liquidated machinery and equipment should be accompanied by growing outlays for replacement. Yet while total investment outlays decrease, extended replacement of capital assets is very restricted. This is especially noticeable in the coal industry, where the coefficients of liquidation are highest and show the highest rate of growth. In the transport-means group the average liquidation coefficient is 2.9 percent and is 0.2 percent higher than the same coefficient in socialized industry. The tremendous importance of means of transport to each of the branches discussed makes it essential to increase investment outlays in this group of capital assets also.

#### 4. Coefficient of Renewal of Fixed Assets

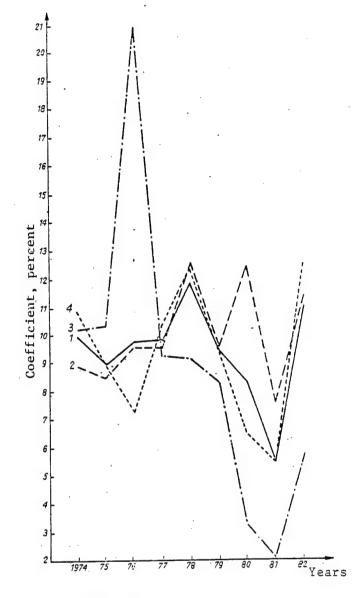
## Fig. 3 shows the formation of coefficients of renewal.

The tendencies which appeared in growths of investments outlays were reflected in the formation of coefficients of renewal. For the coal industry, this coefficient is most favorable in 1978 and 1980, amounting to 12.6 and 12.5 percent, respectively. In 1982, also, investment grew rather significantly in comparison with 1981. A distinct growth in the coefficient of renewal is observed in the coal industry, in the machinery and equipment group (from 14.3 percent in 1974 to 17.7 percent in 1982, while in 1978 it was 25.3 percent, and in 1980 it was 21.6 percent) and in transport-means (from 7.4 to 28.4 percent).

The year 1981 was the least favorable for the coal industry, having the lowest coefficient of renewal—7.6 percent. The growth in investment outlays in this branch is linked closely with the dynamic expansion of the Polish power industry. Most of the Polish power plants are thermal power plants, mainly using hard coal. Hence the enormous importance of the technical quality of the production apparatus in the coal industry. Another, important reason for the high investment outlays is the need to increase extraction for export purposes and for domestic requirements. During this period new mines were started up (e.g., "30th—Anniversary of the Polish People's Republic," "Slask" [Silesia]), construction of new mines was begun (e.g., in the Lublin Coal Basin), existing

Fig. 3. Coefficients of Renewal of Fixed Assets

- 1 Fuels-energy industry,
   overall
- 2 Coal industry
- 3 Fuels industry
- 4 Power industry



mines were enlarged, new equipment was gradually added (e.g., mechanized linings, longwall miners, heading machines, loaders), and coal-industry auxiliary units were built and expanded. Similar growth aspects of the coefficient of renewal can be observed in the power industry (most favorable in 1977, 1978, and 1982). Means-of-transport play an important part in the formation of the coefficient of renewal in this branch (growth from 12.8 percent in 1974 to 26.1 percent in 1982).

In the power industry a process of concentration of power in large-capacity power plants occurred, including Kozienice 2, Rybnik, Ostroleka, Patnow 2, Dolna Odra, Jaworzno 3, and Polaniec. In the fuels industry, on the other hand, a gradual decline in the coefficient of renewal is noted (with the exception of 1976 when the coefficient was 21 percent, the highest in all of the type-groups during the period studied) and there was also a decided improvement

in 1982 as compared with 1981 (from 2.1 to 5.7 percent). An important investment in this branch was the completion in the 1970's of a liquid-fuels pipeline from Gdansk to Plock and the Plock-Wloclawek-Bydgoszcz products pipeline. In comparing the the fuels-energy industry with the entire socialized industry it must be said that the total average coefficient of renewal in the fuels-energy industry, which is 9.5 percent, is 0.7 percent lower than in the entire socialized industry. With a higher liquidation coefficient, the largest part of the investment outlays in the entire branch is made up of regeneration investment (simple capital replacement), the reverse of that which takes place in socialized industry as a whole. In the entire socialized industry, in the buildings and structures group a declining trend is observed in the renewal coefficient (average coefficient, 7.4 percent).

A similar tendency holds in the fuels-energy industry until 1981. In the machinery and equipment group, however, the renewal indicators are 0.7 percent higher than in the entire socialized industry. The highest indicators of renewal appear in the group which wears out the fastest, the means of transport. The renewal coefficient here average 13.6 percent, compared to 12.5 percent in the entire socialized industry.

The favorable coefficients of renewal of fixed assets during 1974-1978, and even in 1979, are due, on the one hand, to the enormous investment outlays made in the first half of the 1970's, which bore fruit during the period mentioned, and on the other hand they are the result of the fact that the entire investment effort was directed at increasing the production capacity of the raw-materials and power industries. This was extremely important in view of the growing difficulties in obtaining supplies, caused by the world raw-materials crisis. The formation of renewal indicators in the latter years of the period studied is the result of an approved strategy, which assumed that:

- -- funds will be concentrated on investments underway,
- --newly-begun investment programs will not be excessively expanded,
- -- the share of modernization investment will be increased, and
- -- there will be discipline in investment and economies will be enforced.

Although the program provided that new investments will be made first of all in the extraction industry (particularly coal) and the power industry, the gradual decline in total investment outlays in the national income resulted in a year-to-year decline in the value of the fixed assets taken from investments, and thus in the coefficients of renewal themselves.

# Coefficients of Replacement of Fixed Assets

Changes in the coefficient of replacement of fixed assets are shown in Fig. 4. Changes in replacement coefficient may be the result, on one hand, of a decline in the value of liquidated fixed assets, and on the other hand they may be attributed to the growth in value of fixed assets taken from investments in a given year. During the period discussed, an overall growth of the liquidation



Fig. 4. Coefficients of Replacement of Fixed Assets

- 1 Fuels-energy industry,
   overall
- 2 Coal industry
- 3 Fuels industry
- 4 Power industry

coefficient and a drop in the value of fixed assets taken from investment was noted. Hence these overall replacement indicators show a declining trend. This is particularly noticeable in the coal industry where the value of liquidated fixed assets is greatest. Replacement indicators in this branch show a general declining trend up to 1981 (from 756.7 percent in 1974 to 263.3 percent in 1981), with the exception of 1980, when the indicator was 469.1 percent. In 1982 the replacement indicator was the same as in 1979. Similar tendencies appear in the machinery and equipment group and the transportmeans group. Capital assets replacement indicators in the coal industry are lower than the same indicators in the fuels industry, and even lower than the replacement coefficients in the power industry. In the fuels industry the period ending 1979 and beginning 1980 is one of a sudden drop in the replacecoefficient (overall from 2,398 percent in 1979 to 706 percent in 1980. The same is true in buildings and structures (from 5,151 to 761 percent) and machinery and equipment (from 1,510 to 676 percent). The worst years are 1980 and The power industry shows the highest replacement coefficients (but with a declining tendency to 1981). The exception here is 1976 (the overall replacement indicator is 138.1 percent), since the indicator of renewal of fixed assets is low while the liquidation indicator is high. In the buildings and structures

group the most favorable coefficient appears for 1981 (1,689 percent). The machinery and equipment group has the highest coefficient of replacement in the years 1977 and 1980. During 1980-1981 we see a sudden drop in replacement coefficients in the entire fuels-energy industry. The lowest coefficients of replacement in the particular type-groups appear in 1981 (in the buildings and structures group it is 1,404 percent, in the machinery and equipment group it is 251 percent, and in the transport-means group it is 366 percent). The declining trend of the capital assets replacement coefficient appears during this period in all of socialized industry.

### 6. Final Observations

The need to regularly regenerate worn-out production capital assets and to modernize them remains constant. The year 1983 is still a period of restrictions in renewal of these assets because of low investment outlays. In some sectors of industry even less is invested than the regeneration of worn-out capital assets would require. That is why, as generated income grows, outlays for regeneration and modernization in industry must be increased. The 3-year plan for 1983-1985 already envisages this, although to a limited degree. The tasks contained in this plan are based to a large degree on domestic raw materials. This is due primarily to the steady growth tendency in the world prices of raw and other materials and to limited availability of foreign-exchange funds with which to import these materials.

If economic activity in the country is to be revitalized and expanded, a rapid growth in coal extraction is necessary and the situation in the power industry must be brought under control. Tasks relating to the fuels-energy industry include:

--hard-coal mining must be increased to 191 million tons in 1985 and preparations must be made to expand this industry after 1985,

-- there must be a rapid growth in the production of electrical energy overall and especially energy produced from brown coal.

-- the construction of power plants which will supply electrical energy after 1985, including the "Zarnowiec" nuclear power plant, must be promoted.

The accomplishment of these tasks requires the necessary productive elements, and particularly capital assets. Statistical data and the coefficients which derive from these data indicate that the fuels-energy industry requires, to an increasing larger degree, renewal and regeneration of possessed capital assets.

The growing consumption of fixed assets and the higher coefficients of their liquidation have not been accompanied in recent years by a proportional increase in the value of funds derived from investment. Failure to promptly replace and modernize machine stock and equipment has increased the average age of capital assets. This situation forces enterprises to use the capital stock now in their possession more efficiently and economically. One way of improving the economy as regards replacement of capital assets is to put into

operation those components of capital stock which are idle, to restart investments which have been temporarily halted, and to accelerate those investments whose implementation has been slowed down in recent years.

In order to enlarge capital assets it is anticipated that in 1984 funds from that portion of amortization which was obtained as a result of the reassessment of capital assets will be earmarked for the financing of central investments in the materials-production sphere. Systems-type allowances and exemptions from amortization payments to the state treasury will be applied to those branches of industry whose expansion is given priority.

The hard- and brown-coal industry will be totally exempt from amortization payments to the state treasury. The energy enterprises and the coke industry will be assessed amortization payments of 30 percent. The money remaining at the disposal of the enterprises is supposed to stimulate the growth of their own investments, thus improving the unfavorable condition of their own capital stock. More efficient management of capital assets as well as the funds allocated for their renewal and modernization can, to a certain degree, improve the replacement indicators for fixed assets in the fuels-energy industry.

However, in analyzing the replacement indicators as they relate to individual types of fixed assets in each sector of the fuels-energy industry, it must be said that the situation which exists in them is highly complex. It is determined to a large measure by our import capability, particularly imports of equipment and spare parts from the second payments area [capitalist countries], and to the performance ability of construction-assembly enterprises on specialized jobs.

On the other hand, the policy of replacement of capital assets, as conducted by the ministry, should result in such utilization of all material sources and economic mechanisms as to gradually bring about a restoration of the proper proportions between the components of the capital assets and the phases of the technological process in the fuels-energy industry.

9295

CSO: 2600/986

POLAND

PRODUCTION OF COAL, OTHER ENERGY SOURCES AT HALF-YEAR MARK

Warsaw RZECZPOSPOLITA in Polish 1 Jul 1985 pp 1, 2

[Text] The last six months were not easy because of harsh winter and this applies to the mining and energy producing industry too. Production results were also impacted by the fact that this period this year had two working days less than the same period in the previous year and that, like in the rest of economy, there were material shortages and difficulties in cooperation and transportation. Despite all that, the production goals were fully met.

According to the information provided by the Ministry of Mining and Energy, the total coal output was 124 million tons, including 95.5 million tons of hard coal. The average daily output of coal mines was 635,000 tons which was higher by 1,000 tons than in the first six months of the previous year. Noteworthy is a significant increase of hard coal production on Saturdays which was 25,000 tons higher than during the same period in 1984. On the average, the miners produced 615,000 tons per day on Saturdays.

Seventeen million tons of hard coal was channeled into exports. Coal exports this year were lower than in the first 6 months of last year because of increased demands of domestic economy, especially during the first few months of this year when over 3 million additional tons of coal were used, mostly for heating.

Difficulties in transporting coal by rail continue. Currently, over 2.3 million tons of coal are stored at the mines, which upsets the mine's production rythm and often creates an apparent shortage of coal on the domestic market and for export.

The open pit miners produced almost 28.5 million tons of lignite which exceeds the production of the first six months of the last year by over 3.8 million tons. Energy producing plants are the main recipient of lignite because there is still little interest in this fuel among small industrial plants and residential customers. Until the end of June, only 300,000 tons of lignite and briquettes were sold on the market.

Since the beginning of the year, 7.7 billion cubic meters of gas were delivered to the economy, the same as a year ago. Certain shortages of gas deliveries to the industry occurred in the first 2 months of this year. Since March, gas

producers' deliveries to their main customers, primarily the chemical and metallurgical industries, increased but were not fully used by them. For instance, in April and May of this year, the chemical industry plants used only 70.7 percent of requisitioned gas. The increased gas deliveries are not likely to be continued in the fourth quarter when the residential requirements will pile up. This should serve as a warning signal to the industrial gas customers.

Energy workers produced 69.3 billion kWh of electrical energy, i.e. 1.9 percent more than in the first 6 months of the last year. The requirements for electrical energy were fully satisfied and, as soon as the difficult winter days ended, the energy producers commenced the regeneration of production equipment. So far, electrical equipment having 10.3,000 MW capacity has been overhauled and equipment having the capacity of 5.3,000 MW is in the overhaul process. Also, the coal stocks exhausted at the beginning of this year are being rebuilt. Until the end of June, 3.2 million tons of coal were placed in the stocks of power plants and electrical heating plants.

8801 CSO: 2600/905

POLAND

INTERAGENCY MEETING ON PROBLEMS IN MINING INDUSTRY

Warsaw ZYCIE WARSZAWY in Polish 5 Jul 85 p 2

[Article by Marek Kownacki: "We should Save Fuel and Energy"]

[Text] The supply of fuels and energy, mainly hard coal, is one of the basic prerequisites for the fulfillment of economic plans—with these words Deputy Prime Minister Zbigniew Szalajda opened a new session of the interagency meeting. After the severe winter, it became necessary to revise the fuel and energy balance for the current year, which was done in April. Now we should assess whether these decisions still remain in force and how to prepare for higher fuel consumption over the fall and winter season.

Four issues were discussed by the specialists representing the ministries of mining and energy, supply management, transportation, foreign trade, GIGE [Chief Inspectorate of the Energy Economy], retail trade and local administration: production of coal, its distribution throughout the country, exports of coal and electricity and quota-setting for the industrial consumption of fuel and energy.

It follows from the presentation by Minister of Mining and Energy Czeslaw Piotrowski that 191.5 million tons of coal will be mined this year, or as much as last year, despite 2 fewer working days this year. However, the mining conditions and supply of equipment for mining are deteriorating almost from one month to another. Hence the miners must expend an increasing effort in order to fulfill the provisions of the plan. Recently, two major problems were added to the difficulties the mines are experiencing. The outflow of employees from mines is the first problem. A total of over 6,000 persons have retired or left for other enterprises, out of which 5,000 in the last month. It was pointed out that salary incentives are ceasing to be as important for mining as was intended.

Transportation of coal from mines is the other problem. It is estimated that in June alone coal output was 80,000 tons less than the available capacity would allow because the mines were suffocated by the fuel in coal heaps. This problem will not be easy to solve because the PKP [Polish State Railways] at present has 10,000 cars fewer at its disposal than a year ago. This explains the appeals and decisions on making a strenuous organizational effort in order to overcome the crisis in coal transportation.

According to the decisions, exports of coal will remain at a level of 36 million tons. Similarly, an increase in exports of electricity above the previously adopted volume is not expected.

The issue of setting fuel and energy quotas for industry was prominent in the discussion. In the opinion of deputy prime minister Szalajda, the quotasetting operation is already well behind schedule and prompt decisions are needed in the matter so that all enterprises are made aware of precisely what they have at their disposal before the fall [consumption] peak.

Representatives of the Ministry of Retail Trade pointed out the inadequate supply of coke and the so-called coal rounds for private consumers. It was stated that an improvement in supply can only occur after they manage to save the coal in industry.

At the meeting, detailed previsions concerning the transportation of coal exported to the USSR and other countries through the LHS [Steel and Sulphur Line] were coordinated. Additional allocations of coal to cement mills were also discussed. This will only become possible if savings in other industries are achieved.

In summation, the meeting stated that only strict discipline in using fuels and energy in the months to come will enable us to get through the forthcoming fall-winter peak with a degree of comfort. Also, the previously accepted fuel and energy balance for this year should be kept within its originally established allocations. Changing the balance requires the complete consent of the leaders of the government.

9761

CSO: 2600/875

POLAND

ELECTRICIANS ASSOCIATION REPORTS ON INDUSTRY PROBLEMS, NEEDS

Warsaw PRZEGLAD TELEKOMUNIKACYJNY in Polish No 3, Mar 85 pp 91-93

[Speech by Jacek Szpotanski, President of the Association of Polish Electricians]

[Excerpts] The 23rd General Congress of Delegates of our Association—the Association of Polish Electricians (APE)—which convened today, is supposed to evaluate the Association's activities, outline courses of future action, and elect the leadership for the next term.

Despite the fact that the country has been industrialized under the precepts of a "central planning" economy, it has not been possible to maintain a harmonious expansion of some fields of this economy, especially in the public-utility power industry and other branches of the electrical industry. All of this led to the fuels-energy crisis in the late 1970's and early 1980's, which was followed by the economic and sociopolitical crisis.

Obstacles appeared which made further intensive development of industry impossible. Lack of investment in public utilities—in power-plant construction—and to an even greater the neglect of the electric-power network, are obstacles which are most difficult to remove today. But these are not the only obstacles. A similar situation, truly alarming, exists in transportation, housing construction, agriculture, and many other sectors which are dependent on the importation of raw materials, technical ideas (squandered up to now), the development of a raw-materials base, and domestic production.

The nation, therefore, is faced with tremendous tasks which will require the dedicated commitment of all the people, a commitment such as has been shown previously in this century. We all realize that the crisis, and that includes the energy crisis, cannot be solved in a very short time. Therefore, everything points to the fact that if we are not able to make meaningful progress in efficient and economical use of energy in the immediate future we will experience another energy crisis, the results of which may be far more critical than the crisis of the 1970's.

The Association of Polish Electricians, to the best of its capabilities, participated in the application of technical progress and in the rebuilding of the country. It also called attention to the anomalies which occurred and to the need to take other action. It assumed tasks of ever-greater difficulty and complexity, which helped to develop it from the organizational standpoint.

Its membership grew. In the year that it was established, the APE numbered 400 members. In 1939 it had grown to 1,521, and in 1981, to 59,940. During 1982-1983 83 members resigned, i.e., approximately 10 percent of the membership.

There were a number of reasons for this, but the most important reason was considered to be the changes which took place in recent years—changes which evoked a protest against the country's sociopolitical and economic situation and which caused a search for the guilty in all organizations, including the scientific and technical societies. Some of the people, including engineers and technicians, took a passive attitude, waiting for a miracle or an order, an attitude which has in some not changed up to now. For them, public activity has become a waiting game, often on a dead—end road leading to nowhere.

The events of 1981 and martial law which lasted over half the term had various social repercussions, which had tremendous impact on social and economic life. Unfortunately, during this period very little was done in the factory circles, which was due to the apathy of many members but also because the managements of enterprises did not find a place for them or appreciate their role.

The activity of some sections, committee and commissions also decreased, as if our colleagues had lost their own initiative and faith in the effectiveness of their action. They waited for guidelines, instructions, or orders. On the other hand, other sections came to life which had previously shown very little activity but are now expanding their wings, spreading innovation and technical and scientific progress.

The negative persons also appeared, those taking perverse or spiteful action, promoting interests foreign to the Association or acting in their own interest. Although their actions resulted in a new look at matters and unconventional thinking for the good of the Association (unintended by them), the slowdown or halt of the Association's activities has to be regarded as a highly negative result.

Cooperation with the ministries, which are at the center of our interests, also varies. A great deal remains to be done for the common good on the part of all those involved. By cooperation favorable to the involved parties it is understood to mean that assurance will be given by the ministries and planning centers that conditions will be provided which will facilitate a continuous, ongoing exchange of information on decisions being made and that the Association's representatives will be able to take part in preparing and consulting on developmental plans and engineering investment plans, and in analyzing the results of the execution of these plans. We are now anticipating a series of cases where purely theoretical, administrative forms of cooperation will be replaced by substantive cooperation on an ongoing basis in accordance with Council of Ministers Resolution No 65 passed in 1983.

During the present Congress we complete the 1981-1984 APE term and begin the new 1984-1987 term. Our guiding thought for the activities of the Association in the new term has been chosen by the Congress. It is "Expansion of the Electrical Industry is the Country's Future."

Through the Association's joint efforts we have prepared a "Report on the State of Polish Electricity," which contains courses of development of all fields of electricity in a situation where the second half of the 1980's will be extremely difficult and complicated from the economic standpoint, under conditions where a serious shortage of electrical energy may occur, and thus serious losses and restrictions. Today energy has become a factor which to an important degree determines the quality of life just as does communication, transportation, or feeding the nation.

At the 20th Congress of Technicians we spoke out for the need to harmoniously develop the entire economy. The opinions expressed must be projected into the longest possible time frame. Along with other associations we have come to the conclusion that the Federation should prepare an "Engineering Forecast of the Country's Development." We have agreed to share in the preparation of this report and will prepare our portion within the required time.

We have also stated that various branches of electricity require work pertaining to organization, modernization of production, improvement in quality and correct technical policy, as well as work relating to efficient application and utilization of all energy carriers. At one time we presented a proposal for the establishment of a "Polish Power Industry," and assurance of its maximally possible economic autonomy. We still maintain this position, but today the matter must be considered on a wider scale and in another time frame.

We just unify and consolidate action on behalf of the development of the entire power industry, so that the electrical industry will become a national industry, so that it can develop harmoniously and catch up with world progress. For this industry we must obtain the patronage of the highest decisionmaking authorities. The electricians must measure up to all kinds of assignments and their moral qualifications must include the courage to consistently voice and defend their viewpoints—for the good of the country.

We should inform society of the absolute urgency to conserve energy, at every step and with everyone participating. We must inform it of the need to build nuclear power plants in Poland. We must talk about the inevitable appearance of not just the positive but also the negative effects of technical progress and about all of the basic problems connected with the development of a technical civilization, so as not to allow people in the future to hate engineering, to look upon it as a source of evil.

In order to be equal to this, engineers and technicians must enjoy the proper standing in society. Aside from high moral and professional qualifications, they must be in a position to achieve commensurate material status in return for their work. Their earnings should reward them for the maximum energy and initiative they show and not degrade their importance in society.

There are still many measures which the Association must take. Many of our activities must be expanded, consolidated or improved. This pertains primarily to cooperation with colleges, ministries, institutes and many other institutions. We want to see to it that membership in the Association is an honor and a distinction, that it can be relied upon to provide a circle of friends

who can be counted on in hard times also, in whom understanding and help can be found. Activities for the good of the members and the good of engineering must be inseparable. Knowing the shortcomings, I believe that the achievements, too, of the APE measured by a scale of difficulty and capability are great, and I believe that they augur a good future for our Association. The burdens and difficulties will surely transform themselves into lasting values and triumph if the entire Association heads for the goal which is great electricity for the good of the country. We have to be aware that the road to this goal is neither short nor easy, but if we want to lift Poland high we must set or assign great goals and seek the means to achieve them.

9295

CSO: 2600/974

POLAND

MANTEUFFEL DISCUSSES AGRICULTURAL REGIONS, CROP DISTRIBUTION

Warsaw DZIENNIK LUDOWY in Polish 8-9 Jul 85 p 3

[Article by Prof Dr Ryszard Manteuffel: "Man Decides About Everything"]

[Text] The goal of agriculture as a sector of the national economy is to provide the country with agricultural raw materials. What matters is their quantity, type and quality which ensure the feeding of the country's population, a suitable standard of living for the rural population in terms of material and spiritual well-being and to the extent possible, the exporting of these raw materials or finished products in order to obtain foreign-exchange for import needs. Hence, questions arise as to what should be produced, where, how much and how? We are interested here in the second question: Where to produce?

In order to answer the question, "Where to produce?", it is first of all necessary to know where a certain item is produced today. From the answer to this dual question of what is produced and where currently and whether it is not necessary to change certain places of production, comes the double meaning of the term "regionalization of agricultural production." The passive sense, of the term thus, where certain products are manufactured currently, is what amounts and in what proportions—we call this "distribution" of agricultural production. In turn, we call the active meaning of this term; i.e., where these products ought to be manufactured from the point of view of functionalism and efficiency of production—"arrangement" of agricultural production.

The concept of "agricultural regions" has come about from the analysis of the distribution of agricultural raw material production, which has maintained itself for a longer period of time in a given country, and in this case in Poland. Studying the course of this phenomenon has given the basis for the theory of "agricultural regions". The foundations of this theory were created in the first half of the 19th century by the classical scholar of agricultural economic, Johann von Thunen (1783-1850). He outlined the well-known "agricultural regions" which were later called "Thuhenian regions" on the basis of the cost of transporting an agricultural raw material unit, the type of road on which the transport takes place, the type of pulling force and on the basis of the raw material's transport endurance. The conditions and method of transporting have changed drastically since that time. The

kinds of regions and their arrangement have changed as well but the substance of the theory remains the same. On the basis of its principles, the boundaries of agricultural region are outlined today. Also on its basis, the boundaries of tax districts, which influence the amount of the uniform farm tax, are also established.

Differences between agricultural regions, hence, their boundaries as well are determined, speaking in the most general terms, by the type, volume and structure of total production obtained from a larger land-use unit [jednostka przestrenna], thus, in practice total agricultural production obtained from 100 hectares of cropland. The following influence the character of total agricultural production: environmental and climate conditions, the human factor, economic conditions (supply of the means of production, market outlet for agricultural products, etc.), proportions between the peasant sector and the state sector, the production-technical infrastructure and finally, the socio-living infrastructure.

In the area of natural environmental conditions which significantly influence the character of agricultural production is the quality of the soil but also nearly equally important—its cultivation. Soil cultivation is man's responsibility; therefore, the producer's. The production volume is determined to a large extent by the investment level of a given farm and region—hence, its infrastructure. Again, man influences one and the other, sometimes for a great number of years. An example of this is Wielkopolska, which with small exceptions, does not have the best soil in Poland but it does have old cultivating traditions and exceptionally efficient and enlightened farmers.

The agricultural population number also does not account for production from a unit of cropland. Here, in turn we may give as an example the Bydgoszcz Province which with very low agricultural employment has one of the highest total production per hectare in Poland. Here, the deciding factor is the large average land area of private farms, good investing and knowledgeable farmers.

Finally, the amount of total production per hectare is determined to a large degree by the infrastructure of the region. Man also creates it: both the decision-maker who decides how to raise and improve production as well as the one who builds it. Thus, ultimately man decides about everything. Prof Theorore Schultz, an economist from the University of Chicago who concerns himself mainly with agricultural matters, received the Nobel Prize several years ago for the clear presentation of this truth.

The functionalism [racjonalnosc] of agricultural regionalization in every - European country, hence, also in Poland is determined, above all, by the share of basic cultivated crops in the structure of arable land and in total agricultural production. Reference is made here to grain, basic crops, root crops and other industrial crops as well as permanent grasslands. In our country, there exist three main problems of regionalization in the area of crop production.

Years ago, grain in Poland was intended mainly for the self-supply for agriculture both as a food raw material and as feed. Today, the rural population percentage has dropped off sharply and continues to drop. Farmers

use their own grain to an increasingly lesser degree. They obtain their bread and grain product supplies primarily from the marketplace. Grain as feed finds it way to feeding troughs to an increasingly greater degree by way of the market. Grain has become the main and deciding raw material for industry (mills, feed mixing centers and other processing plants). Despite this, the number of provinces which count considerably during the procurement of grain comes to 17 depending on the given year. The provinces with the highest procurement of grain are situated mainly in the western part of the country. The leading provinces in this respect are: two provinces from the Poznan area, two from Slask and the Szczecin Province.

It is well-known fact that sugar beets are a 100 percent commodity crop. There are two main regions of large beet production in Poland: the Slask-Wielkopolska region in the western part of the country and the Zamosc region in the east, Unfortunately, the greatest number of sugar factories and thus, the main processing potential is in the western regions. This makes it necessary to transport huge amounts of roots from the east to the west in the fall. This entails a particularly great seasonal overburdening of transport, primarily rail transport and heavy losses in the sugar yielding ability of beets due to the prolonging of the sugar making campaign. The amount of transported beets surpasses 3 million tons annually. This results from the history of the development of the sugar making industry in our country. Great capital investment efforts are being made. However, this requires time and huge amounts of money.

In turn, potatoes constitute primarily fodder for hogs, particularly on private farms. However, this crop is also a food raw material. In connection with the shift of the country's population to urban areas and a sharp demographic increase, the demand for potatoes to food the urban population is growing at a rapid pace. The main potatogrowing regions are situated primarily in the eastern part of the country and to a lesser degree in central Poland on lighter soil in regions with high agricultural employment. The potato is also, although to a smaller extent than beets, an industrial crop. Potato processing plants are situated to an incomparably higher extent in the western part of the country than in the east. Hence, similar though not as great problems as with beets, particularly with the fall transport of potatoes which are more susceptible to freezing than beets.

The third great problem with the regionalization of agricultural production is the distribution of permanent grasslands in the country. They are concentrated, above all, along the country's borders. On the map and in simplified terms, they create a sort of crescent effect whose middle has comparatively less grassland. On the other hand, the number of ruminants (cattle and sheep) is in general higher per 100 hectares in the central provinces than in those situated along the borders. This causes the incomplete use of vast areas of grassland. This problem is a source of constant concern in our agriculture.

There also exist serious problems in animal production related to the fact that the highest procurement from a unit of land area of basic animal products such as milk and salughter livestock appears in areas other than where large cities and large industrial or tourist centers are found where there is a large concentration of people.

Thus, out of 10 provinces with the largest procurement of milk per hectare, only one, i.e., the Lodz Province, in which this procurement is the highest, has a large city. The ramaining large cities are outside of provinces that have the largest procurement of milk. This necessitates that the milk be transported long distances. Above all, this affects the Katowice Province. In turn, milk producing cattle is very closely tied to local farm fodder. Therefore, changing the location of milk production would be just as economically irrational as depriving fields of their main source of organic fertilizer.

Slaughter livestock production, particularly that of hogs is becoming increasingly less dependent with the passage of time on local farm fodder. Thus, the location of its production will be less of a problem as production increases on the basis of industrial feed. Currently, however, the greatest production of slaughter livestock, particularly that of hogs is situated in the western regions of our country, in Wielkopolska, Slask and Pomorze.

9853

CSO: 2600/920

#### BRIEFS

POLISH-SOVIET ECONOMIC COOPERATION--Economic cooperation between Poland and the USSR with special emphasis on scientific-technological problems was the subject of discussion on 9 July between Zbigniew Szalajda, deputy prime minister, and Aleksandr Aksenov, Soviet envoy to Poland. [Text] [Warsaw TRYBUNA LUDU in Polish 10 Jul 85 p 7] 8609

UNDP REP VISITS--Mr G. Arthur Brown, first deputy of the UNDP Administrator, is visiting Poland at the invitation of the Polish foreign affairs ministry. The UNDP is the UN primary agency involved in offering technical assistance such as training of specialists and providing equipment for scientific research and constructed projects. On 8 July Mr Brown met with Zbigniew Szalajda, deputy prime minister. The discussion focused on the activities of the UNDP and Poland's participation in projects undertaken by this UN agency. The same day, Mr Brown visited Henryk Jaroszek, deputy foreign minister. The meeting was devoted to the discussion of all aspects of the cooperation between Poland and the UNDP and in particular of the program of activities for the years 1987-1991. [Text] [Warsaw TRYBUNA LUDU in Polish 9 Jul 85 p 4] 8609

TURKS OFFER ELECTRONIC EQUIPMENT--On 8 July an exhibition of Turkish electronic equipment, including VCR as well as black and white and color TV sets (on Toshiba license, among others), radios, radios with cassette player/recorders, and cash registers, was opened at the Forum Hotel by the Turkish envoy to Poland, Mr Muammer Akcer. Turkey is among the biggest importers of the Polish electro-machine industry products--we are currently constructing there several electric power stations, among others. Fast growth of the polish export to Turkey requires better familiarization with the trade offer of that country. Currently, the UNITRA Foreign Trade Agency is already importing from Turkey all kinds of electronic components. It is expected that ready products also will be imported for the PEWEX stores. [mk] [Text] [Warsaw RZECZPOSPOLITA in Polish 9 Jul 85 p 2] 8609

'BELCHATOW' OUTPUT--The "BELCHATOW" Electric Power Station has significantly increased its output. It is half-completed now with the start-up of the sixth generator. The "BELCHATOW" power station will contain 12 of them. Two days after its preliminary linkup with the state electric power system the "BELCHATOW" "six" last Sunday reached its full power output of 300 megawatts and it is now the second largest electric power station after

"KOZIENICE." After undergoing the necessary tests and trials, the "six" will begin commercial operation prior to the Liberation Day holiday. [Text] [Warsaw ZYCIE WARSZAWY in Polish 9 Jul 85 p 1] 8609

USSR UNION REPS VISIT--Poland was visited by the delegation of the Occupational Safety Department of the USSR Trade Union Central Council headed by the Chief Technical Labor Inspector of the USSR Automobile, Tractor, and Agricultural Machines Construction Industries Workers Union. The delegation met with the Polish chief labor inspector and management representatives from the Socio-Occupational Department of the PZPR Central Committee and of the occupational Safety Council of the National Alliance of Trade Unions [OPZZ]. [Text] [Warsaw ZYCIE WARSZAWY in Polish 1 Jul 85 p 2] 8609

POLISH-HUNGARIAN PLANNERS MEET--On 5 July Manfred Gorywoda, deputy Prime Minister and chairman of the Council of Ministers Planning Commission, was visited by Gyula Kovacs, deputy chairman of the Hungarian National Planning Office. They discussed further development of economic cooperation between the two countries and specifically noted the need for intensification of specialization and production cooperation. Furthermore, they pointed to visible progress in the work on the coordination of the economic plans of Poland and Hungary for the years 1986-1990, which will allow to complete it soon and to sign the final documents. [Text] [Warsaw ZYCIE WARSZAWY in Polish 6-7 Jul 85 p 2] 8609

SOVIET-POLISH RAIL ELECTRIFICATION--The electrification project of the Stargard Szczecinski-Gdansk railroad line has begun. The Stargard-Runowo Pomorskie segment of 45 km will be completed first. The work on this line is to be completed in December 1986. The first electric train on the Stargard-Gdansk line is expected in 1989. It should be noted that the Szczecin-Stargard line has been already electrified. Furthermore, in the years 1987-1890 the electrification project will cover the lines Koszalin-Kolobrzeg and Slupsk-Ustka, both leading to popular seashore resorts. [Text] [Warsaw ZYCIE WARSZAWY in Polish 9 Jul 85 p 2] 8609

SOVIET HERRING IMPORTS--The "RYBEX" Foreign Trade Company has taken steps aiming at increasing fish supplies in order to provide the domestic market with greater amount of fish favored by the consumers. According to the Fisheries Management Association in Szczecin, new exchange agreements have been signed with the Soviet union which will provide Polish consumers with 5000 ton of deep-sea herring. It is anticipated that the agreements will be broadened to provide an additional 15,000 tons of herring for our domestic market this year. These are additional agreements reached outside the regular trade protocol. [Text] [Warsaw ZYCIE WARSZAWY in Polish 9 Jul 85 p 2] 8609

BUS CONTRACT WITH CHINA--Warsaw, 15 Aug--The Sanok-based automobile plant has recently signed two contracts with its Chinese partner on supplies of additional 300 coaches. This year, the Sanok plant will supply a total of 350 "Autosan" H-9-20 coaches to China. It is envisaged that the last group of these coaches will have been sent to China by the end of this November. A group of Polish engineers from the "Autosan plant" are currently staying in China to provide service instructions on the first 50 coaches to have reached Chinese ports. [Text] [Warsaw PAP in English 1410 GMT 15 Aug 85 LD]

FISHING AGREEMENT WITH USSR—An agreement on cooperation with the Soviet West Baltic Fishing Amalgamation Zapriba has been signed at the foreign trade Enterprise Rybex Office in Szczecin. According to the agreement, in exchange for surplus quota of sprats fished by Polish fishermen, we will get an equal quantity of fresh and tinned fish sought after in our market. There are considerable quantities, because it is expected that we will deliver 7,000 metric tons of sprats to the Soviet Union in the coming fishing season, with a possibility of another 3,000 metric tons. The protocol also provides for other forms of direct contacts between both countries' fishing enterprises. A similar agreement was also signed in Moscow, and an initial part of 30,000 metric tons of tinned fish will reach Poland in the coming days. The whole contract will be fulfilled by the end of next year's first quarter. Altogether, around 100 million tins of fish will reach shops all over the country. [Text] [Warsaw Domestic Services in Polish 1005 GMT 2 Aug 85 LD]

NEW TURBINE TESTING DEVICE DEVELOPED—The Energy Equipment Production and Maintenance Plant in Lubliniec, Czestochowa District, is the only plant in the country which performs maintenance (starting with inspection all the way to major overhauls) of turbogenerators and hydrogenerators for the whole energy industry in Poland, both the power plant producing energy for others and the organic factory power plants. Also, the Lubliniec plant repairs transformers and electric motors and produces spare parts for energy producing equipment and for export to, among others, Czechoslovakia, Yugoslavia and India. The quality of maintenance performed at Lubliniec is very high. Recently, preparations were started for assembling a device badly needed by the Lubliniec plant and Polish energy industry, namely a centrifugal device for testing the durability of rotors and coils and for eliminating vibrations. This device will lower the cost of the maintenance cycle and prolong the useful life of rotors. [Text] [Warsaw RZECZPOSPOLITA in Polish 1 Jul 85 p 3] 8801

POLISH CARGO--Over the past 7 months, 128 ships of the Polish Ocean Lines (PLO) fleet carried over 3 million tons of cargo and nearly 9,500 passengers. Forty-two billion zlotys were received for services rendered. The results are worse than those achieved a year ago. However, at that time the ship-owner had 14 more private ships, and four chartered ships. The quantity of Polish cargo is still lower than expected. This testifies to the reserves of Polish foreign trade. [Text] [Warsaw Domestic Service in Polish 1800 GMT 6 Aug 85 LD]

FLOOD STATISTICS—The Main Antiflood Committee reports that 170,000 hectares of arable land have been flooded throughout Poland. Twenty—six thousand people and many soldiers with amphibious equipment have been taking part in rescue operations. Some 2,600 people have been evacuated from flood—affected areas. [Text] [Warsaw Domestic Service in Polish 1700 GMT 12 Aug 85 LD]

CSO: 2600/905

ROMANIA

### EFFORTS TO INCREASE AUTOMOTIVE INDUSTRY EXPORTS

Bucharest REVISTA ECONOMICA in Romanian No 28, 12 Jul 85 pp 15, 16, 28

[Article by Olga Mihaescu: "In The Spirit of the Guidelines Laid Down By Comrade Nicolae Ceausescu: Improvement in the Competitive Ability of Export Supply, Technical Level--Quality--Promotion"]

[Text] One of the principal directions of development of the machine-building industry over the last 2 decades has been the manufacture of vehicles for the three transportation systems of the national economy, land, air, and sea. Romania currently has powerful modern enterprises building locomotives and railroad cars, highway transportation vehicles (passenger automobiles and utility vehicles), airplanes, seagoing ships, and river vessels. It is a significant fact that the output of the vehicle industry in the aggregate has come to represent nearly one-fourth of the total output of the Romanian machinebuilding industry.

In the sphere of utility motor vehicle manufacture, which is to be discussed here, Romania now has extensive production facilities, which are well known in the country and abroad, at large specialized enterprises such as the Brasov Bus Factory, the Autobuzul in Bucharest, the Automecanica in Medias, and the Mirsa Mechanical Enterprise, to which are to be added more than 10 specialized horizontal industry enterprises and a technical support and service enterprise.

In addition to meeting the needs of the national economy for transportation equipment, this industry has also gradually become an important exporter. Thus, in keeping with the export tasks for this year, more than one-half of the output of trucks and buses and more than 75 percent of the utility vehicle output will be delivered to foreign customers in more than 60 countries.

The latest version of the Bucharest International Fair, in 1984, was the occasion for display of new developments on the export list for this year: a modern touring coach with a 256-horsepower engine, a bus with 4-wheel drive, new TV van utility vehicles, a Diesel light truck, a double-cab, 4-wheel-drive light truck, the TV minibus for passenger transportation, etc, new types of dumptrucks (55-ton and 100-ton), road trains (such as those for drill rigs, 30,000-liter tank trucks for general cargo, and others), and truck tractors (for hauling liquid petroleum products, furniture, general cargo, etc). In addition,

products are modernized at a rapid pace in this sphere. Of a total of 58 basic types of trucks, automobile chassis, and truck tractors (a number which is increased by their being outfitted in horizontal industry with bodies and equipment adapted to different purposes), 59 percent represent new vehicles production of which will begin on a staggered basis over the 1985-1990 period, 12 percent are modernized vehicles in current mass production, and 9 percent redesigned vehicles.

On the basis of the share of output represented by exports, it may be said that the entire utility motor vehicle industry specializes in export. This has a significant impact on all the operations of the industrial central agency and of the Romanian enterprises in this field, considering the technical operating conditions prevailing among various foreign customers, the technical standards required on different markets, the competition faced on the foreign market, the trends observed in current world demand under the impact of energy restrictions, dependability and service requirements, and trade policy.

Under these circumstances, which are specific to production for the foreign market, product design acquires new objectives: the technical standards which must be complied with, testing by customers, a variety of structural design solutions (preferably in the order book), to meet particular requirements as regards fields of application, environment, etc. The same is true of activities connected with preparation for production (problems constantly crop up in connection with provision of new materials, technologies, and tools and instruments), commercial activities (securing long-term contracts adapted to the product manufacture cycle, payment instruments, marketing research to substantiate long-range export programs), and suitable production control methods (such as computer control of product models and modifications, programming of modified assembly, of order book record maintenance, the terms of delivery of contracts, and scheduling of contract execution). Efficient conduct of export activities, and accordingly of all activities in these enterprises, consequently depends on good knowledge of foreign market developments and trends, in accordance with which appropriate adjustment is made in the objectives for all functions, in order to meet all these requirements.

In the opinion of specialists, the utility vehicle industry must now make allowance for the existence of restrictive factors affecting the magnitude of the world market, such as the advanced state of market saturation in the developed countries, the longer service life of motor vehicles resulting from the ongoing process of improvement in the technical design and performance qualities of products necessitated by the relatively high level of fuel costs, and the drastic reduction of imports by developing countries resulting from the difficulties encountered in obtaining new credit, along with the policy of integration into production and implementation of utility vehicle production lines and assembly plants, etc.

The existence of these restrictions causes the development of utility vehicle exports, the winning of new segments of the market, to depend primarily on the speed of assimilation of technical and technological

innovations imposed by the criteria of economic efficiency of production and operation which govern production, and accordingly world demand.

To remain competitive, the automotive industry must give proof of high innovative effort which also includes continual reconsideration of the production and export list. From the viewpoint of specific research and development objectives, in Romania these requirements are classified under the following major headings: reduction of energy consumption and lowering the rolling resistance of vehicles, search for improvements in control systems, environmental protection restrictions, increase in vehicle transportation safety, and improvement in the ratio of payload to total weight of a motor vehicle (tare coefficient).

In the opinion of specialists, the unceasing transfer of techniques and technologies between producing societies and countries (reciprocal transfer), flexibility in rapid adaptation of embryonic technical innovations, is currently the watchword of development of the utility vehicle indutry.

Romanian Motor Vehicles Meeting High World Standards

As is quite natural, Romanian cargo vehicle production exhibits many of the aspects and trends observed throughout the world in the development of this field.

Redesign and modernization of trucks and derivative products are the objectives of a vast campaign being carried out in accordance with the provisions of the Program for Improvement of Product Technical and Quality Levels, Lowering Raw Materials, Fuel, and Energy Consumption, and Better Use of Raw Materials and Semimanufactures over the 1983-1985 Period and to 1990, which has the following aims:

Lowering the empty weight of vehicles by use of high-strength materials for the main components and by extending the use of substitutes of lower specific gravity;

Increase in the degree of utilization of incorporated materials;

Modernization of the principal families of motor vehicles produced under license, the MAN;

Assimilation of new types of motor vehicles using high-powered engines manufactured under the national engine production program;

Increase in the cargo capacity, tare index, and availability index of motor vehicles and in the rated service life;

Replacement of conventional fuels. this question has been the object of research conducted to find ways of using methyl alcohol as a partial substitute for diesel fuel. Operation of a vehicle with a mixtue of 30 percent methanol and 70 percent diesel fuel could yield a saving of around 80 tons of diesel fuel over the service life of the vehicle, about 9 years or 540,000 kilometers. The modernization program calls for continuation and completion of this research.

Development of high-efficiency transmissions and running gear. The new family of transmissions of original designed developed at the CCSITA [Research Center of the Automotive Industry] in Brasov exhibits improvements over preceding designs (more transmission speeds, synchronized clutch engagement replacing clutch shoes, a pressurized lubrication system, etc.) ensuring increase in transmission efficiency. The modernization program calls for transition over the 1985-1990 period to series production of transmissions with 9 and 16 speeds for special vehicles. It also calls for transition to a new generation of 13-ton final drives embodying structural improvements.

Improvement in the aerodynamic coefficient by improving bodywork construction and profile. Air baffles on the cab and aerodynamic elements (aprons) on the bottom of the cab have already been tested, and production of new families of truck cabs meeting the aerodynamic requirements set for the individual category of vehicle is to begin under the 1986-1990 five-year plan.

## Active Export Promotion Strategies

The world utility vehicle market has contracted sharply in recent years. At the end of 1984 the registration of new vehicles of this type had decreased 11 percent relative to the previous year (according to estimates made by the publication INTERNATIONALE NUTZFAHRZEUGE). This has had a very adverse effect on the volume of output of the major producing countries. The principal effect of this international market situation, along with speeding up the pace of technical and technological innovation in the area of manufacture, is aggravation of problems connected with marketing and shifting to new export strategies in accordance with the characteristics and trends of international trade in this field: Substantial increase in sales of motor vehicle parts and subassemblies, increase in customer sensitivity as regards pre-sale and post-sale services provided by the manufacturer, increase in the role and importance of commercial publicity and advertising, and increasing dependence of a decision to purchase on the cost of a vehicle and its fuel consumption.

In view of these characteristics, action must be taken in the following directions to improve the level and method of marketing Romanian utility vehicles abroad:

### Market Research

More efficient use of information on business conditions forwarded by agent firms and economic representatives abroad, supplemented by field studies.

Creation of all the conditions needed for organization of an integrated, computer-implemented information system permitting collection, selection, processing, storage, and dissemination of information directly to operational personnel.

Joint publication by research, production, and marketing of periodic technical and economic information bulletins permitting broad information of all persons working in the field of vehicle export.

Signing of cooperation agreements with firms specializing in marketing.

Commercial Advertising and Publicity

Production of publicity films (showing vehicles under operating conditions to foreign end users) and other promotional activities (symposia, technical lectures, trial runs, and demonstrations).

Organization of permanent or long-term exhibits (lasting at least 2 years), for which vehicle prototypes are developed and which may be used for trials and demonstrations, photography, and filming.

Participation in specialized international fairs and expositions, either at the central level or directly.

Participation in international rallies.

Conduct of trials as part of export marketing activities, either by the manufacturer or the partner, with the costs recovered by subsequent deliveries of products or spare parts.

Inclusion in the delivered package of useful items carrying an advertising message: overalls, caps, tee-shirts, travelling bags, food serving sets for travel, thermos bottles, cigarette lighters, etc.

Diversification of the range of prospects, with the assistance of specialized institutions (including those specializing in automotive components).

Marketing Network

Establishment of a network of permanent representatives or delegates and of technical and commercial offices in countries and areas of interest, paid in proportion to sales, to ensure the permanent presence of the specialized foreign trade enterprise, Universal Auto-Tractor, on markets of major interest.

Establishment of Romanian agencies operating in specific regions and of Romanian or joint marketing companies on third markets.

Service and Warranty Period

Granting of competitive warranty terms (about 100,000 kilometers and 1 year from entry of vehicle into service).

Provision of service over the warranty period directly, through the exporter's own network, and outfitting service centers equipment and well trained personnel, with the flat rate system abandoned.

Provision of post-warranty service at market prices.

Ensuring settlement of foreign claims within a period of 7 to 10 days, through unconditional acceptance of the claims for up to 5 percent of the value of the product.

Ensuring prompt delivery of spare parts (both during and after the warranty period), documentation, repair manuals, and parts lists for vehicles delivered to a given market.

Implementation of the provisions of the program for raising the technical and quality level of motor vehicles and improvement in the methods, forms, and practices of vehicle marketing will create the conditions required for substantial increase in the extent of utilization through export of the economic, technical, and organizational efforts to develop the manufacture of these vehicles in Romania and for increasing the representation of this manufacture on the list of products characterizing Romania's participation in the world economic cycle.

Table 1. Development of Production Volume and Exports of Vehicles, 1965-1983

				•
Vel	nicle Groups	1965	1983	Dynamics (%), 1965-1983
1.	Main line diesel and			
	electric locomotives			
	output (number)	110	168	153
	export (number)	45.	66	147
2.	Main line freight cars			
	output (number, 4-		.*	
	axle equivalent)	6,994	11,298	162
	export (number, 4-			
	axle equivalent)		7,642	. 267
	export share (percen	t) 41	68	
	cent			
3.	Main line passenger car	's		
	output (number)	100	404	404
4.	Motor vehicles			
	output (number)	22,795	108,405	476
	export (*) (number)	2,874	39,503	1,374
	export share (percen	t) 12	36	
5.	Seagoing self-propelled		•	
	cargo ships and vessels			
	output (number)	9	19	211
	(thousands of tons			
	dead weight)	29	287	990
	export (number)	4	8	200

<sup>(\*)</sup> Not including tractors (6702 in 1965 and 42 in 1983). Source: Studies based on the Romanian Statistical Yearbook, 1984, pp 93, 264.

6115

CSO: 2700/182

YUGOSLAVIA

STATUS, OUTLOOK OF FERROUS METALLURGICAL INDUSTRY

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 20 Jun 85 p 11

[Unattributed article: "Development Cannot Endure Improvisation"]

[Excerpts] One of the top and key problems of the industry is the very unfavorable structure of the sources of working capital; it is well known how the high burden on income resulting from interest on credits for short-term working capital virtually prevents the accumulation of funds in business activity. This means that in such business conditions, ferrous metallurgy is not capable of accumulating funds for its own reproduction (expanded reproduction, as a rule), but is instead forced to renew its indebtedness every year. In such a situation, it is absurd to speak of successful development.

It is consequently essential to find possibilities, through credit-monetary policy measures and other methods, for a lasting improvement in the structure of the sources of working capital; otherwise, as in the last two medium-term periods, this industry will virtually stagnate.

By actively analyzing and keeping track of the prices for ferrous metallurgy products and the prices of other industrial products (in view of the way in which the prices of this industry have lagged behind for several years), this year it is essential to correct these prices by at least a few index points over the growth in the prices of industrial goods. The economic position of the industry as a whole would thus improve at least to some extent. (At the same time, the delegates add that ferrous metallurgy has never been a generator of inflation, and never will be.)

It should be emphasized that work is now under way on a proposal for shifting the prices of ferrous metallurgy products in order to reduce the growing disparity with respect to the prices of industrial products during the past months. Naturally, the representatives of ferrous metallurgy—aware of the sensitivity of this problem—urge that a decision be made very carefully, but it is obvious that it cannot be postponed indefinitely at the expense of the business activity of the steelworks.

Since the current medium-term period is ending, it is not too early to work out the most suitable concept for the development of this industry until 1990 and further until the end of the century. Priority treatment

should be given to ferrous metallurgy through these documents. If this is not done—as is the situation now—this area will be in a subordinate position with respect to other branches of industry. In fact, the obvious conclusion is that this industry is falling behind with respect to social commitments and the real needs of the country's economic development.

It is thus still necessary to insist upon prompt completion of the draft for the jointly coordinated development of the metal processing industry and of ferrous metallurgy (it is being prepared by the consortium of institutes), which will be used for the future development policy of the branch.

### Ferrous Metallurgical Production

Product	Accomplish	ned (tons) 1984	Plan (tons) 1985
coke	3,440,111	3,470,301	
iron ore	4,061,900	4,350;700	4,410,000
iron	2,036,619	2,846,340	3,207,000
steel	4,129,976	4,219,736	4,471,000
finished products	4,670,342	5,111,268	4,865,000
ferrous alloys	240,362	294,964	283,000

9909

CSO: 2800/384

YUGOSLAVIA

### FERROUS METALLURGICAL PRODUCTION PLAN FOR 1985

Belgrade CELIK in Serbo-Croatian No 112, Feb 85 pp 7-9

[Article by Savo Markovic: "Ferrous Metallurgical Production Plan for 1985"]

[Excerpts] On the basis of the data that the members of the Association sent at the beginning of this year, in general, it can be said that this year's ferrous metallurgical production plan remains at the level of the plan for 1984 (Table 1).

It is only in regard to iron ore and finished steel products that any significant increase in production is planned.

Coal for Coking and Coke

It is planned that 3,772,000 tons of coking coal will be imported for the requirements of coke consumers in the SFRY, which is 272,000 tons more than the amount approved in the SFRY Energy Balance (see Table 2).

If there are no changes in the meantime in the SFRY Energy Balance, then the coke producers and the consumers will only be able to carry out the planned difference in coal imports by using their own foreign exchange earnings.

In addition to the production planned for consumers in the SFRY, it should be mentioned that coke producers in Lukavac and Bakar have also planned on the production of 636,000 tons of coke on the basis of processing and completion.

The total coke production plan is equal to the production plan for 1984, and it is expected that this plan will be completely fulfilled.

Iron Ore

The iron ore mines have planned on the production of 4,770,000 tons, as follows:

RMK Zenica RIZ Skopje MK Smederevo 4,310,000 tons 445,000 tons 15,000 tons

Table 1

General Characteristics of the Plan (in thousands of tons)

Ratio of 85 Plan and 84 Fulfillment in %	97.3	112.7 113.5 103.6	106.9 104.7 111.4 103.5	120.2
nt of lan in %	102.8	89.4 88.4 101.6	93.4 94.2 90.3 97.0	90.7
Fulfillmeht of Production Plan in	3,516.4	2,846.3 2,605.5 240.8	4,223.9 1,440.0 1,641.3 1,142.5	4,760.0
Ratio 85/84	100.0	100.8 100.4 105.3	99.7 98.7 100.6	109.0
1984	3,420.0 2,725.5 4,397.8	3,183.0 2,946.0 237.0	4,529.4 1,528.2 1,818.0 1,177.2	5,248.0
Planned 1985	3,420.0 2,784.0 4,770.0	3,207.5 2,958.0 249.5	4,517.0 1,508.0 1,828.3 1,182.9	5,720.0
Product	Coke: total for energy balance Iron Ore	Iron: total white gray	Steel: total SM LD EI	Finished Products: Ferrous Alloys:

Table 2
Coal Requirements for Coking and the Production of Coke

Work Organization	Coal Req. (tons)	Coke Production (tons)
RMK Zenica KHK Lukavac MK Zelezara Sisak	1,851,000 1,226,000 695,000	1,370,000 900,000 514,000
Total:	3,772,000	2,784,000
According to SFRY Energy Balance:	3,500,000	2,632,000

In comparison with the production plan in 1984, this year's plan is 8.5 percent higher, i.e., about 370,000 tons higher in comparison with the implementation.

The total requirements of the ironworks for ore in 1985, however, have been calculated as being 6,978,500 tons, which means that 2,015,000 tons are planned to be imported, 1,495,000 tons of which will be from the convertible area. This amount, in the event of full implementation, will be even larger (by about 200,000 tons), since the ironworks have planned on a larger supply of domestic ore than the mines' production plan for this same amount. On the other hand, it is unlikely that it will be possible to carry out such high imports, since in 1984 about 70 percent of nearly the same volume of planned imports was carried out.

### Pig Iron

The production of 3,207,500 tons of iron is planned. This is identical to the 1984 plan, but 12.7 percent higher than what was accomplished last year; 2,958,000 tons will be iron for further reproduction, and 249,500 tons for pig iron.

In addition to their own production, the ironworks are planning on importing 76,000 tons of white iron.

This entire amount of white iron is still a shortage item in the primary phase of steel production, and the shortage will be even more pronounced unless the planned imports of iron ore take place.

### Steel Production

Of the total planned production of gray steel, amounting to 4,517,000 tons in 1985, the largest portion—about 40 percent—has been planned by the steelworks composing RMK Zenica. The Slovene steelworks have planned on a share in production of about 18.5 percent, and the Smederovo Metallurgical Combine has about a 16.5 percent share in the planned production of gray steel. The remaining 25 percent consists of the plans of the steelworks in Skoplje, Sisak, Niksic, and Split.

Table 3

Steel Production Plan by Steelworks
(in thousands of tons)-

Production by Process					
Steelworks -	SM	LD	EI		Total
RMK Zenica Slovenske zelezarne MK Smederevo RIZ Skopje MK Zelezara Sisak Zelezara Niksic Zelezara Split	850 285 93 280	930 645 <b>.</b> 8 253	24 548.3 6.8 157.6 86.5 282	-	1,804 833.3 745.6 410.6 366.5 282
Total:	1,508	1,828.8	1,180.2		4,517

It is planned that 42,900 tons of this quantity of steel will be used for the steelworks' own foundries, while all the rest of the steel will be cast in ingots (1,589,200 tons), slabs [brame] (431,000 tons), blooms (930,000 tons), slabs [slabove] (956,400 tons), and beams (316,500 tons).

In order to produce the planned amounts of steel, the steelworks need 2,252,000 tons of scrap steel, 679,000 tons of which will be from imports (130,000 tons from the convertible area and 594,000 tons from the clearing area). The rest will be from their own scrap steel and scrap from domestic sources.

9909 CSO: 2800/384

YUGOSLAVIA

'PARTNERS' WITHDRAW FROM KOSOVO DEVELOPMENT PROJECTS

Pristina JEDINSTVO in Serbo-Croatian 13 Jul 84 p 6

[Summary] Of the 98 self-management agreements signed between enterprises in more developed areas and those in Kosovo, only 49 have received approval for building or modernization from the Kosovo Associated Bank, the reasons  $\cdot$ being lack of quality programs, of readiness for income-linking between enterprises, of pooled funds, and of market research. Analyses have shown, it was reported at a meeting of the Kosovo Presidency, that most projects are being carried out on the basis of credits, not income-linking, that some self-management agreements stipulate high rates of compensation for economic operation of the project, that various conditions are attached to building projects, and few want to take risks in jointly building future capacities. As a result, some "partners," such as "Utva" in Pancevo, "Sloboda" in Sombor, and "Astra" in Zagreb, are withdrawing from further joint development of programs already started in Prizren and Vucitrn. Others fear losses and support the self-management agreement on pooling funds and labor only until the project is built, leaving to Kosovo the responsibility for production, purchase of raw materials, imports of spare parts, exports, etc. It was said at the meeting that most business partners see a great danger in the fact that they have no guarantee from commercial banks, that design, construction, and technology are being carried on without legal rulings, and that construction cost overruns will follow inflationary trends.

Of the 17 projects built in Kosovo through the pooling of labor and resources, all are operating largely well, except the "Termika" enterprise [affiliated with the Ljubljana plant]. About 77 million dinars have been allocated to 76 projects for developing industrial production; while 8.5 million dinars have been allocated to 12 programs for developing agriculture which, it was said at the meeting, is considered more important for the future development of the province. Most of the projects are located in seven opstina centers, with Dragas and Klina opstinas not represented by even one project.

CSO: 2800/418 - END -